THE EFFECT OF CAPITAL STRUCTURE ON PROFITABILITY OF MANUFACTURING COMPANIES LISTED IN DAR ES SALAAM STOCK EXCHANGE

SICHIZYA STEVEN FRED

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF BUSINESS ADMINISTRATION OF THE OPEN UNIVERSITY OF TANZANIA

2015

CERTIFICATION

I, the undersigned certify that have read and here by recommends for acceptance by the Open University of Tanzania (OUT) a dissertation entitled “The effect of capital structure on profitability of manufacturing companies in Tanzania” in partial fulfillment of the requirement of the masters degree of business administration of the Open University of Tanzania

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Dr. Raphael Gwahula (PhD)

(Supervisor)

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Date

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DECLARATION

I, Sichizya Steven Fred, do hereby declare to the SENATE of the Open University of Tanzania that this dissertation paper is the result of my original work, and that it has not been submitted for the similar degree in any other university.

……

Sichizya Steven Fred

……....

Date

DEDICATION

This work is dedicated to my Lovely wife, Blandina E. Pelekamoyo, my daughters, Emilia and Leah, my father Fred D. Sichizya, and the late mother Emilia Kazimoto.

ACKNOWLEDGMENT

My sincere gratitude is extended to those who assisted me to facilitate the production of this report. I thank my Supervisor Dr Raphael Gwahula who provided valuable input and guidelines to this study. His contribution has been useful to make this study meet the program standards. I also thank my research course Instructor, Dr Prochus Ngatuni for his contractive lecturers which guided me during the whole period of research proposal preparation and report writing.

I thank my fellow students who in one way or another provided assistance during the time of conducting this research activity. Finally, I thank my wife Blandina Pelekamoyo, and my family for the support they gave me during the period of writing this dissertation. I return Glory to God for his care and protection that enabled me to successfully completes this study

ABSTRACT

This study analyzed the effect of capital structure on profitability of listed manufacturing companies in Tanzania using panel data of six companies listed in the Dar es Salaam Stock Exchange during a 5 year period. The period was from 2009 to 2013 in which 30 observations were obtained. Panel data for the selected companies were analyzed using fixed effect regression statistical technique to test the relationship between capital structure variables and return on asset (ROA) and random effect used to test the relationship between capital structure variables and return on equity (ROE). Other statistical methods of partial correlation and summary of descriptive statistics were also used to analyze the study results. Variable computations were done with the assistance of STATA computer software. The results of this study revealed the mixed results, a negative relationship revealed between debt to equity ratios and return on equity. Debt to asset ratios indicated a positive relationship with return on equity when random effect regression used. Other results indicated a positive relationship between ROA and all capital structure variables using fixed effect regression method. Both, Correlation and regression models indicated a positive relationship between debt to assets ratios and company profit in terms of ROE and ROA while only debt to equity ratios showed a negative relationship with ROE as indicated by both methods (regression and correlation models). This study recommend to managers of manufacturing companies to increase the reliance of short term debt to asset ratios and long term debt to asset ratios as a source of finance because they have much influence in profit generation on both return on equity (ROE) and return on asset (ROA) as indicated by regression results.

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DSE	Dar es Salam Stock Exchange
MMI	Modigliani and Miller
EBIT	Earnings before Interest and Tax
TDEQ	Total Debt to Equity ratio
DTS	Debt Tax Shield
WACC	Weighted Average Cost of Capital
NSE	Nairobi Stock Exchange
LD/EQ	Long term Debt to Equity
ROE	Return on Equity
SD/EQ	Short term Debt to Equity
ROA	Return on Assets
TA	Total Assets
TC	Total Capital
ROCE	Return on Capital Employed
EPS	Earning per Share
TCC	Tanzania Cigarette Company
TBL	Tanzania Breweries Limited
TOL	Tanzania Oxygen Limited
VG	Value of Geared firm
VU	Value of Un geared firm
TD/AST	Total Debt to Assets ratio
LD/AST	Long term Debt to Assets ratio
SD/AST	Short term Debt to Assets ratio
KE	Cost of Equity
KD	Cost of Debt

CHAPTER ONE

INTRODUCTION

1.1 Background of the Problem

Capital structure has a crucial role to play on determining company's financial performance and fulfills the expectations of stakeholders who always demand the increase of their company's value. Goyal (2013) argued that, "capital structure decision is critical for any firm for maximizing return to the various stakeholders and also enhance firm's ability to operate in a competitive environment". Moreover, Awunyo and Badu (2012) stated that "even though generally firms have a choice on how to combine debt and equity, managers attempt to ascertain a particular combination that will maximize profitability and firm's market value". Ross (2002) also showed the importance of capital structure decision to finance managers by stating that, "finance managers try to find the capital structure that maximizes the value of the firm". His argument shows that capital structure decision is one of the crucial decisions that help to maximize company value.

The idea of relating company's capital structure and its value started since the establishment of irrelevancy theory of capital structure by Modigliani and Miller in 1958. This theory was cited by Toraman (2013) which stated that, "firm value is independent of its capital structure". In recent years, researchers come up with different perspectives of their studies; some revealed the positive relationship between capital structure and company profit while others revealed the negative relationship between the variables. Safiuddin (2015) and Adesina (2015) in their study results, they found that capital structure was strongly associated with firm's performance. Narayanasary

(2015) and Mwangi (2013) concluded a negative relationship between capital structure and company profitability. Because of the controversial results revealed by previous researchers, that situation provided an opportunity for a researcher to add the knowledge by analyzing the effect of capital on profitability of listed manufacturing companies in Tanzania. The results obtained were compared with the trade off theory of capital structure. Researcher revealed mixed results; positive relationship between the variables which was consistent with the trade off theory and negative relationship which was not consistent with the trade off theory

Since most of researchers in Tanzania managed to the relationship between capital structure and commercial bank performance, this study based on measuring the relationship between capital structure and profitability of listed manufacturing companies. Kipesha (2014) and Kaaya (2013) conducted the study on the relationship between commercial bank performance and capital structure in Tanzania. There are several researchers who analyzed the effect of capital structure on firm performance in developed countries. However, empirical studies on the impact of capital structure on firm performance in developing countries especially in Tanzania are very little. This study filled the gap and adds the new knowledge by analyzing such kind of relationship here in Tanzania.

This study used Dar es Salaam stock exchange as a data collection point. It is a stock market where investors can buy and sell financial securities such as shares and bonds. The stock market was established in 1996 and became operational in 1998. Up to now

the stock market has managed to list 21 companies and among them, 14 are local while 7 are cross listed companies.

1.2 Statement of the Problem

Companies usually need resources for them to grow and develop their operating activities however; there are constraints in financing company resources. For that case, company resources should be applied with care so as to create enough shareholders value and for users of company resources. This study was intend to assist finance managers and company managements to have guidance on attaining optimal financing decisions of using debt and equity in order to improve their company's financial performance. This argument was supported by Kibet (2011) cited by Mwangi (2014) who argued that company managers lack adequate guidance for attaining optimal financing decisions.

The study about capital structure is a crucial tool used in maximizing company financial performance which is the best interest of shareholders who expects dividends and capital gains from the company. Mansoon (2014) stated that "the decision of capital structure choices is of paramount importance for firms and optimal capital structure is such a mix of debt and equity that maximizes the firm's value and reduces the weighted average cost of capital". Capital structure decision also helps managers to accomplish their financial strategies like investment and daily operational activities. The argument supported by Toraman (2013) who stated that the selection of capital structure components and uses play an important role during the determination of financial

strategies of the company. Mireku (2014) also argued that capital structure is strongly linked to the capability of organization to fulfill the expectations of their stakeholders.

Researcher got an opportunity to add the knowledge by analyzing such relationship in Tanzania because for many years, the link between capital structure and company profitability of the firm has been the subject of global debate and yet there is insufficient evidence to support this argument.

1.3 General Research Objective

The main objective of this study was to analyze the effect of capital structure on profitability of manufacturing companies listed in Dar es Salaam stock exchange.

1.4 Specific Research Objectives

(i) To analyze profitability of manufacturing companies listed in Dar es Salaam stock exchange.

(ii) To analyze capital structure ratios of manufacturing companies listed in Dar es Salaam stock exchange.

(iii) To determine the relationship between capital structure and profitability of manufacturing companies listed in Dar es Salaam stock exchange

1.5 Research Hypothesis

The researcher tested the truthiness of the statement by either accept or reject the hypothesis statement at 5% significance level. There was only one hypothesis statement

which was divided into null and alternative hypothesis. The null hypothesis (H0) and alternative hypothesis (H1) was as follows,

(i) Ho: There is no significant relationship between capital structure and company profitability.

(ii) H1: There is a significant relationship between capital structure and company profitability.

1.6 Significant of the Study

The results of this study will provide financial guidance to managers, business consultants and investors with the necessary techniques of combining debt and equity and being able to maximize company performance. This study will assist decision makers especially finance managers and policy planners of both public and private companies to formulate better policy decisions in respect of the mix of debt and equity capital and therefore increase shareholders value and reduce bankruptcy costs. This study will be used by investors and other people with the intention of investing to analyze the companies and see what kind of capital structure mix generates more profit for the company. This study will assist other academicians to write further studies concerning financial issues and add the knowledge to the community. Academicians who intend to write dissertations for Bachelor and Masters Degree programs provided in Tanzania and in other parts of the world may use the study results as the reference to support their studies.

This study will assist finance managers and other finance officers in public listed companies to advice on their management about the best source of finance which

contribute more profitability of the company. Investors and other company stakeholders after reading this study will be in a position to know the profitability and capital structure indicators of the companies in which they would like to invest and acquire returns in terms of dividends or capital gains.

1.7 Organization of the Study

The second chapter of this study consisted of literature review which clarified definition of key study concepts, theoretical literature of the study where theories related to the study were elaborated. In that section, empirical literature was also reviewed. Moreover, research gap and conceptual framework were part of that section. Chapter three of this study clarified about the methods of data collection, research methodology, data processing and analysis of the study.

Moreover, the study talked about chapter four which talked about study findings and discussion. In that chapter, empirical results of the study were discovered and compared with previous studies and theories of capital structure. Then chapter five of this study talked about the conclusion and recommendation of the study. Finally, this study consisted of final pages which were references and appendices of company data or information used for data analysis purpose. Appendices also consisted of statistical results already analyzed by regression, correlations, and descriptive statistics with the help of STATA computer software program.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covered literature and views of other researchers who supported the research topic. This chapter was divided into two sections, section one covered definitions of key concepts and clarifications of theories related with the study topic called theoretical literature review while section two clarified ideas of other researchers presented in their research reports, journals and books related to this study called empirical literature review.

2.2 Conceptual Definitions

This section defined the key concepts of the study and those concepts were capital structure and profitability of a company which were the study variables

2.2.1 Capital Structure

Capital structure is how a firm would be able to fund its future investments projects via debt, equity or mixed. Capital structure was also defined by Roshan (2009) as a mix of debt and equity capital maintained by a firm. There is a sign of stability about the meaning of capital structure if newest definition by Narayasanary (2015) is compared with the older definition by Roshan (2009) because both of them considers a mix of debt and equity capital which form a company capital structure.

2.2.2 Company Profitability

This is an outcome or result of company business operations. That company result is the difference between the company revenue and expenditure. Burja (2011) defined

company profit or performance as the direct result of managing various economic resources and of their efficient use within operational, investment and financing activities. In this study, company profit was a dependent variable measured by Return on equity and return on asset.

2.3 Components of Financial Statements

In this study, researcher described two types of financial statements as a guide for data collection purpose from listed manufacturing companies. Those financial statements were balance sheet and income statement.

2.3.1Balance Sheet

Pandey (2010) defined balance sheet and income statement of a company as follows. He defined balance sheet as a statement that indicates the financial condition or the state of affairs of a business at a particular moment in time. To provide more clarification on this, balance sheet consists of information about resources (assets) and company obligations (liabilities) and owners funds (equity) at a particular point of time. Normally balance sheet prepared at a particular date reveal the firm's financial position at that specific date.

Moreover, Pandey (2010) defined company assets as the valuable economic resources owned by the firm which are divided into current and noncurrent assets. Current assets are short term in nature while noncurrent assets are long term in nature. Liabilities represent debts payable in the future by the company to its creditors. They are divided into current and long term liabilities; where current liabilities are debts payable within an accounting period while long term liabilities are the obligations in period longer than

one accounting period. Another part of balance sheet is owners equity which is the capital contributed by shareholders of the company. Owner's equity according to Pandey (2010) is divided into two parts, "paid up share capital and reserves (retained earnings)". Paid up capital is the amount of funds directly contributed by the shareholders through purchase of shares while reserves or retained earnings are undistributed profits.

2.3.2Profit and Loss Account

Pandey (2010) defined profit and loss account as a score board of the firm's performance during a period of time. Since the profit and loss account reflects the results of operations for a period of time, it is a flow statement. Profit and loss account represents the summary of revenues, expenses and net income or net loss of a company, and net income is the difference between company revenues and expenses at a particular financial year.

2.4 Capital Structure Ratios

Capital structure ratios as represented by leverage ratios indicate the proportion of debt and equity in financing the firm's assets, Pandey (2010). To judge the long term financial position of a firm, financial leverage or capital structure ratios are calculated. These ratios indicate a mix of funds provided by owners and lenders. As a general rule, there should be an appropriate mix of debt and owners equity in financing the firm's assets. The use of debt magnifies the shareholders earnings as well as increases their risk. Creditors treat the owner's equity as a margin of safety that is if the equity base is thin, then creditors risk will be high.

2.4.1 Debt Ratios

According to Pandey (2010) debt ratio normally used to analyze the long term solvency of a firm. The firm may be interested in knowing the proportion of the interest-bearing debt in the capital structure. Debt to equity ratio is the relationship describing the lenders contribution to the company. Chandy (2012) defined debt to equity ratio as the financing of total assets of a business concern done by owner's equity (also known as internal equity) as well as outside debts (known as external equity). How much fund has been provided by the owners and how much by outsiders in the acquisition of total assets is a very significant factor affecting the long term solvency position of a firm. In other words, the relationship between borrowed funds and owners capital is a popular measure of the long term financial solvency of the company.

2.4.2 Factors Determining Capital Structure

Different previous studies have been indicating either negative or positive influence on firms leverage ratio. Factors like firms profitability, tangibility of assets, company growth and size are said to affect firm leverage. Profitable firms companies attracts debt financing because of their ability to settle company obligations, companies with large fraction of asset tangibility have the chance of attracting more financiers because noncurrent assets acts as collateral for loan repayment purpose.

In terms of company size, bigger firms are more diversified and the chance for them to become bankruptcy is less hence attracts more financiers. Narayanasary (2015) measured the determinants of capital structure using leverage as dependent variable against profitability, tangibility, growth, size and non debt tax shield as independent

variables. Researcher used multiple regression analysis and revealed the positive impact of firm's profitability, firm's growth, size and non-debt tax shield on firms leverage while only tangibility of assets showed negative relationship.

2.5 Profitability Ratios

Chandy (2012) defined profitability ratio as a measure of the operating efficiency and performance of the company. Users of financial statements like management, shareholders, suppliers and customers are interested with performance ratios because they help them to judge the company performance. Shareholders require profitability information because help them to judge the survival of the company in which they have invested. Creditors of the company want to get interest and repayment of principal regularly. Moreover, for owners of the company a good profitability ratio assure them to acquire a huge required rate of return.

2.5.1 Return on Asset

This is the ratio showing the contribution of company assets on profitability of the company. The greater the ratio the greater the company performance contributed by company assets of that company.

2.5.2 Return on Equity

This is the contribution of shareholders fund (equity) in generation of company profit. It is a ratio of company profit to shareholders fund. The greater the ratio the greater the performance of a company generated by equity

2.6 Theoretical Literature Review

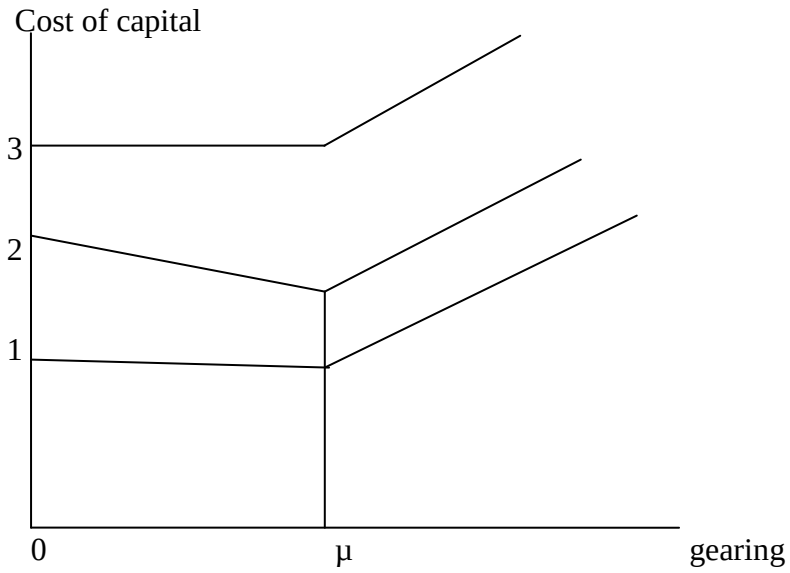
2.6.1 Capital Structure Theories

In this section, researcher reviewed different capital structure theories as follows

Traditional Model of Capital Structure

Under this, the value of the company is affected in the way it is financed. According to this model, change in capital structure directly affects the firm's market Value. Optimal capital structure exists at the point where weighted average cost of capital is minimized. Under this model the value of the company and its capital structure are related

Figure 2. 1 Traditional Model of Capital Structure



From the above figure, the vertical line on the left hand side represents cost of capital; the horizontal line represents the firm's gearing. Line 3 represents cost of equity (Ke), line 2 represents overall cost of capital (Ko), line 1 represents after tax cost of debt. Overall cost of capital is minimized in order to maximize firm's value. μ is the value of the firm where overall cost of capital (Ko) is minimized or it is the maximum value of the firm which represents the point where there is an optimal mix of debt and equity.

Under traditional model of capital structure, there are two main assumptions described, the first assumption is that all earnings are distributed as dividends that mean no retention by the company and the second assumption is that firm's earnings are expected to remain constant throughout.

According to Frentzel (2013) with his study on capital structure theory since Modigliani and Miller, stated that "the traditional view of capital structure assume that there is a specific optimal gearing level that eventually minimizes the cost of capital and maximizes the value of the firm and shareholders wealth"

Modigliani and Miller theory of capital structure

These are the earlier theories of capital structure explaining the effect of capital structure on the value of the firms. The first theory discovered by Modigliani and Miller in 1958 and their second theory which corrected the first theory was in 1963. This theory as cited by Sharma, K. (2014) explained MMI and MMII as follows

Modigliani and Miller (MMI)-1958

Founders in this theory concluded that the value of the firm is self determining of capital structure and that the value of un geared firm is equal to value of geared firm. Their research based on MMI model without and with taxes. Under MMI without taxes, this theory is also called capital structure irrelevancy theory, which means that in capital market without taxes, value of the firm is not related to its capital structure.

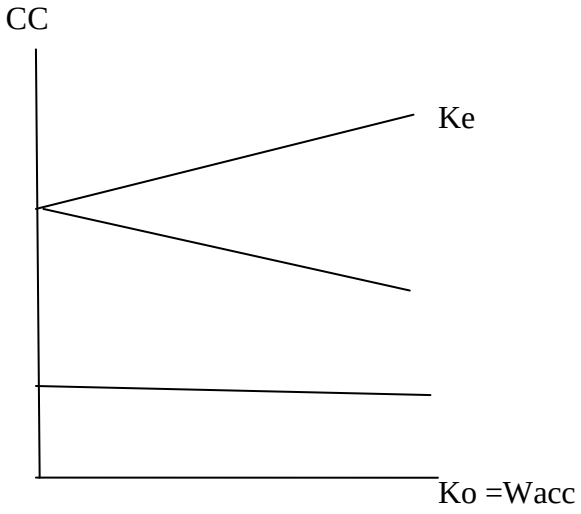
The argument is that the value of the firm depends on firms earning and risk of its assets not its capital structure which means Value of geared firm is equal to the value of un geared firm. Their argument is represented by the following equation where Vg is

the value of geared firm, Vu is the value of un geared firm, EBIT is the earnings before interest and tax, Ko=is the overall cost of capital and Ku cost of un geared firm; $Vg = Vu = EBIT / K_0 = EBIT / K_U$ .MMI with taxes states that the value of geared firm is greater than that of un geared firm because of the tax advantage or debt tax shield achieved from the interest expense deducted before taxable income of a company. According to their model, they believed employing debt leads a company to pay lesser corporate taxes. The following equation represent the MMI with taxes where VG is a value of geared firm, VU is a value of un geared firm, PV (DTS) is a present value of debt tax shield,Tc is corporate tax, Ki is after tax cost of debt, DG is a debt market value. $VG = VU + PV(DTS)$ Where; $PV(DTS) = T_C KiDG / Ki = T_C DG$ then total value of geared firm is $VG = VU + T_C DG$

Modigliani and Miller (MMII)-1963

MMII with taxes stated that as company's debt ratio increases, it increases the firm's financial risk and pushes the cost of equity capital up, but because of the corporate taxes subsidies, of the cost of debt (Ki) then the overall cost of capital falls. This model expand the first idea by including the risk of a firm to become bankruptcy after raising huge amount of fund using debt, they insisted that using more debts increases the threat of bankruptcy for a company. Cost of equity of a company goes up because of the higher risk of using debt that the company has and shareholders perception about the future of the company on which they have invested. The following graph show the behavior of MMII model with tax, where CC is a cost of capital, ki is a cost of debt, ke is a cost of equity and Ko is an overall cost of capital

Figure 2.2 Behavior of MMI model with taxes



MMII without taxes states that capital structure of a firm has no effect on overall cost of capital (Ko) and the assumption is that firm's cost of equity (Ke) increases with the increase in Debt to equity ratio. The behavior of this model is presented by the following equation where DG is a market value of debt, EG is a market value of equity, Ke is a cost of equity, and Ki is a cost of debt and Ku is a cost of capital for un geared firm. Ke=Ku+(Ku-Ki) DG/DE; as Ke goes up also DG/EG goes up

Trade off Theory of Capital Structure

According to Modigliani and Miller (1963), cited by Sharma (2014), they argued that, "trade off theory created a benefit for debt in that it served to shield earning from taxes". This theory states that, there is an advantage for corporations to be financed with debt because of the balance between the tax benefits gained by corporations and costs of bankruptcy due to the risk of taking more debts. The tax benefit occurs because of the interest deducted from before interest and tax earnings (EBIT), which brings about tax advantage because taxable income become less and hence less corporate tax payment for the company.

The capital structure decision is critical for the existence of any business organization as to the maximization of returns to shareholders in the current business environment although Modigliani and Miller theory has a weakness if compared with the current business environment. Ross (2003) described the Modigliani and Miller theory by stating that $VG = VU + T_C DG$. According to this theory, one can increase firm's value by increasing leverage, implying that firms should issue maximum debt. That means the increase in firms debt ratio influence the increase in firm performance.

Pecking Order Theory

Pecking order theory as cited by Nicola and Myers (1984), states that "companies priories their sources of financing, first preferring internal financing, then debt, lastly equity as a last resort. They also came up with a conclusion by giving out the reason of treating equity financing as a last resort. They said that, 'when managers issue new equity, investors believe that managers think that the firm is overvalued and managers think that the firm is overvalued and managers are taking advantage of this overvaluation. As a result, investors place a lower value to the new equity issuance."

Internal financing is mostly suggested by this theory because it is less costly as compared with external financing of debt and equity, debt finance increases cost to the firm in terms of interest expense while equity finance give out firms authority. Siro (2013) argued that firms would prefer internal source of finance as compared to

expensive or costly external finance and therefore profitable firms that generate earnings are expected to use less debt than those that do not generate earnings.

Agency Cost Theory

Agency theory states that leverage companies are better for their shareholders because debt level can be used as a monitoring tool for managers hence maximize company performance by lowering agency costs. Kajola (2010) as cited by Odita and Osuji (2012) with their study on the impact of capital structure on financial performance in Nigerian, supported the argument by stating that, higher leverage is expected to lower agency costs, reduce inefficiency and lead to improvement in a firm's performance.

2.7 Empirical Literature Review

Several empirical studies around the world have been conducted to measure the relationship between capital structure and company profitability. In most cases, researchers came up with mixed results; some revealed a positive relationship between the variables, others revealed the negative relationship while other researchers revealed the contradictory results between study variables. Such kind of results shows that the topic is still debatable hence it's high time to measure such relationship in Tanzania using manufacturing companies listed in Dar es Salaam stock exchange.

Decision on capital structure is among the challenging issues facing companies because its decision determines the performance and survival of the company. Kipesha (2014) argued that, business firms especially small ones are said to die or poorly perform due to different challenges facing managers on the financing decisions. Due to importance of capital structure decisions on firm performance, studies have conducted to measure its applicability and revealed mixed results. Researcher targeted the previous

researchers, those who revealed the positive relationship, those who revealed negative relationship and those who revealed no relation.

The first group of researchers tested the relationship between capital structure and company profit proved the negative results between the variables as follows; Mireku (2014) in Ghana listed companies revealed that firms financial performance have negative relationship with financial leverage and depend more on internal source of finance thus supporting the pecking order theory. Chisti (2013) in listed companies in India discovered that Debt to equity ratio of Indian listed companies was negatively correlated to profitability ratios. This empirical evidence shows only the negative relationship between the variables without showing the other source of finance which is mostly preferred by Indian Listed companies which might prove the applicability of the capital structure theories.

Kayode (2014) in Nigeria conducted a study on the effect of capital structure on firm performance in Nigeria using the panel data of 10 companies from 2003 to 2012. Researcher used descriptive and regression technique was employed to test the relationship between performance variables of return on asset and return on equity against capital structure variables of total debt to total assets, total debt to equity. In his study results he revealed that capital structure was negatively related to firm performance. Lavorskyi (2013) in Ukraine conducted a study on the impact of firm performance in Ukraine. Researcher used regression to measure the relationship between the capital structure variable of Leverage ratio against performance variables of Return on assets, total factor productivity (TFP) and EBIT margin. After analyzing

the relationship, researcher found that firm leverage was negatively affecting firm performance.

Another study was done by Tailab (2014) in America used a sample of 30 energy American firms for a period of nine years from 2005 to 2013 to test the effect of capital structure on profitability of energy American firms and found the negative relationship between debt ratios and performance variables of return on equity (ROE) and return on asset (ROA) while company size in terms of sales indicated a negative effect only on return on equity (ROE) of the energy American firms. Researcher used multiple regression method to analyze his study data where 10% of ROE and 34% were predicted by independent variables of short term debt, long term debt, total debt to equity ratios and firm size measured by company sales.

Another study Leon (2013) was about the impact of capital structure on financial performance of the listed manufacturing firms in Sri Lanka. He used a panel data of 30 listed manufacturing companies from 2008 up to 2012 to measure the relationship between the variables. The data were analyzed and hypotheses were tested using correlation and regression analysis using SPSS. The findings of his study revealed that, there is a significant negative relationship between leverage and return on equity at the same time the relationship between leverage and return on asset showed no relationship.

Nasreem (2013) also tested the relationship between firm's capital structure and financial performance in Pakistan using a sample of 83 companies listed in Karachi stock exchange. Researcher used debt to equity ratio as a measure of capital structure

while other ratios like earning per share, price earnings ratio; operating profit margin, return on asset and return on equity were used as proxies for firm performance. After analyzing data using regression model, researcher found that financial performance of a company was significantly affected by their capital structure and their relationship was negative in nature also capital structure showed a negative relation with company market value

Study by Marietta (2012) in Kenya listed companies used multiple regression analytical models to measure the relationship between independent variables of institutional debt and institutional equity as capital structure variables against the dependent variables of ROA and ROE as firm performance variables and revealed that there is a negative relationship between total debt and firm performance. In terms of relationship between equity and firm performance, his study revealed that there is a significant positive correlation between return on equity (ROE) and total equity using Pearson correlation.

Moreover, empirical evidence was shown by Ratheepkanth (2011) in Sri-Lanka listed companies' revealed negative relationship between capital structure and company profitability. The study by Kaaya (2013) about the relationship between capital structure and commercial bank performance in Tanzania concluded that the relationship between these two variables (capital structure and bank performance) was negative and their results were significant at 5% significant level.

Another study conducted by Shubita (2012), measured the relationship between capital structure and profitability of Jordan companies. The researchers used correlations and multiple regression analysis to measure the relationship between variables to reach the

intended results. The researcher used ROE as performance variable against capital structure variables of Short term debt to Asset, Long term debt to asset, and total debt to asset as independent variables. The study results showed a negative relation between debt finance and profitability. Their findings implied that an increase in debt position is associated with a decrease in profitability of companies, thus the higher the debt the lower the profitability of the firm. The researcher used only one performance measure of ROE to come up with the conclusion, this study used two company performance measures of ROE and ROA to analyze their relation with capital structure indicators.

Toraman (2013) examined manufacturing companies in Turkey and discovered the negative relationship between short term debt to total assets, long term debt to total assets and Return on assets (ROA). He also discovered no significant relationship between total debt to equity ratio and ROA. Researcher used regression model to measure the relationship between capital structure and company profitability using a sample of 28 manufacturing industries.

Another study by Ntogwa (2014) with his study on the influence of capital structure on working capital and growth opportunity of a firm in Tanzania, found that the growth opportunity of listed companies in Tanzania does not depend on the capital structure but depends on the investment opportunity available in that company. Feng (2013) in Sweden listed companies used regressions and correlations models to measure such relationship and revealed the negative relationship between capital structure and corporate performance.

Badu (2012) targeted 7 listed banks in Ghana from 2000 to 2010 and tested the relationship between capital structure and banks performance. The regression result of his study indicated that capital structure is inversely related to performance of the listed banks in terms of return on equity. His study used one profitability measure of return on equity to come up with the study results, this study included return on assets as another indicator of company profitability.

Lovorskyi (2013) examined the impact of capital structure on firm performance in Ukraine using regression model and found that, firms leverage ratio had negative impact with performance indicator of return on asset (ROA) at -0.098 confidence level, leverage against earnings before interest and tax (EBIT) at -0.119 and leverage ratio against total productivity factor at -0.458. Other study by Zeitun (2007) in Jordan used a sample of 167 Jordan companies from 1989 to 2003.His study results indicated a negative relationship between firm performance indicator of return on asset with capital structure indicators of total debt to total assets, long term debt to total assets, short term debt to total assets and total debt to total equity.

Odita (2012) used regression and Pearson correlation to analyze the impact of capital structure on firm performance in Nigeria. He used performance measures of return on assets and return on equity while capital structure measures were debt ratios and controlling variables of asset turnover, firm size, age, asset tangibility and firm growth opportunity. His study results indicated a negative and significant relationship between performance measures of return on assets and return on equity against debt ratio. Alawwad (2013) in Saudi Arabia, used regression technique to measure the relationship between the variables of capital structure against variables of firm performance and

found that all levels of debt ratios had inverse relationship with firm performance indicators of return on asset(ROA), return on equity(ROE) and profit margin.

The second group of researchers measured the relationship between capital structure and company profitability and revealed the positive relationship between the measurable variables of their studies. Hughes (2013) listed firms in Ghana, discovered a significant positive relationship between short term debt and profitability, negative relationship between profitability and long term debt. The overall results of the study revealed that Ghana firms listed in Ghana stock exchange depended on short term debt than long term debt. Uremagu (2012) Olalebe (2013) and Adesina (2015) in Nigerian companies, their studies revealed that profitability of Nigerian firms depends on capital structure components.

Another study was done by Abiodum (2012) on the effect of optimal capital structure on manufacturing firms performance in Nigeria, used a sample of 10 firms from 2000 to 2009. Researcher used debt ratio as capital structure variable against company performance, and found that there is a relationship between the distribution of debt ratio and corporate performance and their main conclusion was that the manufacturing industries was consistent with trade off theory. That means debt ratio has positive relation with corporate performance.

Moreover Soyebo (2014) used performance variables of return on assets (ROA) and return on equity (ROE) and capital structure ratios of debt to equity and debt to asset ratios to analyze the relationship between the variables. Correlation coefficient and

regression technique used to test a panel data of 10 companies from 2000 to 2011. His study results indicated that the relationship between capital structure and return on asset is not significant across all firms and insignificant relationship was shown between return on equity and debt to asset ratio however the results showed the significant relationship between return on equity and debt to equity ratio for all firms. This justified that a highly geared firm tend to have high profitability.

Zuraidah (2012) in Malaysia, measured the relationship between the capital structure indicators of short term debt, long term debts and total debts against performance indicators of return on assets and return on equity. Researcher used panel data of 58 firms from 2005 to 2010.The results of the study indicated that only Short term debt and total debt had a significant relationship with return on assets(ROA), other capital structure variables had a significant relationship with return on equity(ROE).

Another study showing positive relationship was conducted by Priya (2013) who targeted listed trading companies in Sri-lanka, and analyzed variables using correlation method and come up with the conclusion that debt to asset ratio and debt to equity ratio of listed companies correlated with gross profit margin, net profit, ROCE and ROE at significant level of 0.05 and 0.1 their final conclusion was that, there was a positive relationship between capital structure and financial performance of listed companies in Sri-lanka. Mwangi (2014) targeted non financial companies listed in Kenya and concluded that, financial leverage had a negative effect on performance as measured by return on equity of non financial companies listed in the Nairobi stock exchange.

Jaffna (2013) analyzed the impact of capital structure on financial performance of the listed trading companies in Sri Lanka. He used companies data listed in Sri-lanka stock exchange during 2006 to 2010 and came up with the following results. He used correlation analysis and revealed that debt asset ratio and debt equity ratio and correlated with gross profit margin, net profit margin, ROCE, ROA and ROE at significant level of 0.05 and 0.1 Finally their results concluded a positive relationship between capital structure and financial performance. Another analysis was conducted by Pouraghan (2012) who measured Iran companies using Pearson correlations and estimation of multiple regressions models to test independent variables of Debt ratios and controlling variables of firm size, firm age, asset tangibility and growth opportunities against dependent variables of return on assets and return on equity. He then discovered strong negative relationship between debt ratios and performance measures. Moreover, researcher discovered a positive relationship between controlling variables and performance variables of the companies.

Other empirical studies have shown mixed results where some study variables shows negative relationship while others revealed the positive relationship. Goyal (2013) with his study on listed public sector banks in India, tested the study variables using regression analysis. The results of his study validated a strong positive dependence of short term debt to capital with all profitability measures of ROA, ROE and EPS while long term debt to capital and total debt to capital had a negative relationship with return on assets (ROA), return on equity (ROE) and Earning per share (EPS).

Mihael (2012) in listed firms in Romania, his results indicates that there was a contradictory as the delivered both in favor of the positive correlation and in favor of

negative correlation between the capital structure and firm's performance. Due to this conclusion, it was not clear whether capital structure influenced performance or not, for that case the further study on this relationship has to be conducted.

Abbasali (2012) in Tehran used Pearson correlation and multiple regression models to test the relationship between independent variables of debt ratios against dependent variables of return on asset (ROA) and return on equity (ROE). Researcher also used controlling variables of asset turnover, firm size, and asset tangibility and growth opportunity as other independent variables of the study. The results of the study indicated a negative relationship between debt ratio and financial performance. Also, results indicated a significant positive relationship between asset turnover, firm size, and asset tangibility and growth opportunity with financial performance measure.

Study by Kipesha (2014) with his study on commercial banks in Tanzania, used fixed effect regression model with the help Housman test to measure the relationship between capital structure and banks performance. His results indicated the a presence of significant negative relationship between total debt to equity and long term debt to equity with bank cost efficiency and return on equity, something which implies the presence of negative tradeoff between firm leverage and firm performance. The same study indicated a causality relationship between firm leverage and return on asset.

The other empirical studies base on capital structure have either supports or not supporting the earlier capital structure theories of Irrelevancy theory by Modigliani and Miller, Pecking order theories and trade off theories. Bundala (2012), on his study on

investigating whether Tanzania Listed companies practice Pecking Order Theory, Agency cost theory or Trade off theory. His results of the study revealed that there is a little support for Pecking Order Theory that predicts significant positive slopes for growth rate, liquidity, dividend payout and asset tangibility variables and negative significant slope for profitability variable. These results show that there is a need to prove this relationship in Tanzanian environment. The study by Naidu (2011) in South African companies his findings suggested that, an increase in the usage of debt by a bank has some effect of increasing the profitability of that bank but it was not the sole determinant of an increase in profitability. The findings were significant as it supported the MMII where a firm can increase its value by increasing its use of cheaper debt finance. The results of his study supports the Modigliani and Miller theory II that debt finance is the best approach that influence the increase of the firm's value. The proposed study will reveal the truth of this argument after the final analysis on the relation between the capital structure and profit of Tanzania Listed companies.

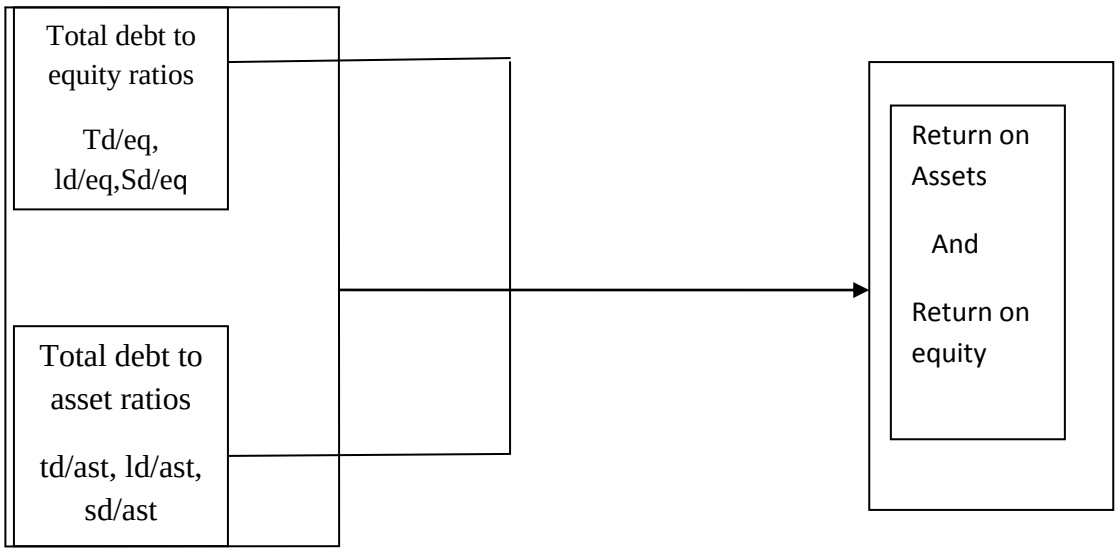
Miglo (2010) with his study was about the implications of pecking order theory, trade off theory, signaling and market timing theory by listed firms. His empirical evidence confirmed that under trade off theory, the leverage of firms was inversely related to the expected bankruptcy costs. The implication on pecking order theory showed that there was a negative correlation between debt and profitability of the firms. Since the implication of two theories of trade off and pecking order theory are mostly related with the proposed study, then the researcher used the correlation results to approve or disapprove theories with the real behavior within the public listed companies in Tanzania. Pontoh (2013) in Indonesia listed companies used regression model to

measure the relationship and revealed that companies in Indonesia depend their funding from internal source, so their companies had application of pecking order theory.

2.8 Research Gap

Many researchers who tested the relationship between capital structure and firm profitability came up with controversial results; some discovered the negative relationship between the variables, some discovered positive relationship while others revealed no relationship between capital structure and profitability. That situation gave the chance for a researcher to add the knowledge by testing the relationship between capital structure and firm's profitability using listed manufacturing companies in Tanzania. Because this topic is still debatable, therefore it was high time to be analyzed, and compare its results with the capital structure theories and see whether there is any relation between them. Also many similar studies about capital structure in Tanzania relied on analyzing the relationship between capital structure and commercial bank performance. Study by Kipesha (2014) and Kaaya (2013). This study targeted manufacturing companies listed in Dar es Salaam stock exchange.

Figure 2.3 Conceptual Framework (Capital structure vs Company profit)



From conceptual framework figure above, debt ratios on the left hand side represented the independent variables (capital structure) while profitability ratios on right hand side represented the dependent variables (company profit). This figure above represented the two regressions equations; the first equation represent the relationship between return on asset and debt ratios or capital structure variables while the second equation represent the relationship between return on equity and debt ratios or capital structure variable. Researcher tested the relationship between the variables got the results and compare them with trade off theory of capital structure.

Researcher used trade off theory to back up the study results because the theory also states the relationship between company debt and its performance. Because this study revealed the mixed results, therefore some variables relationship were consistent with the trade off theory while other variables relationship were not consistent with the trade off theory of capital structure.

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.1 Introduction

This was an essential part of the research activity which showed research procedures plans and techniques used during the whole process of data collection and processing. This chapter covered different aspects like data collection methods, research design, research approach, survey population, and sample size and data analysis techniques.

3.2 Research Paradigm

This study used quantitative approach because this study used quantitative data to analyze the relationship between dependent variable (company profitability) and independent variable (company capital structure).

3.2.1 Type of Research

This was an analytical study where a researcher used already available information which was secondary data of six listed manufacturing companies, analyzed them and came up with study results. Data were collected from six manufacturing companies listed in Dar es Salaam stock exchange from their annual financial statements.

3.2.2 Research Approach

This study used deductive approach where capital structure theory that describes the relationship between capital structure and company profitability was used to develop a proposition. And finally the results of this study confirmed the applicability of the trade off theory by listed manufacturing companies in Tanzania for some variables but others did not confirm its applicability. Trade off theory of capital structure supports the use of

debt by a company and suggests that, debt finance increases company profitability due to tax advantage of acquired by companies because of interests deducted before tax.

3.2.3 Research Design

In order to carry out the research assignment, Researcher used descriptive research design which aimed at testing associations of relationships. The researcher used secondary data from DSE published financial statements for companies under the study.

3.2.4 Research Strategies

Researcher used a secondary data from published financial statements, during the period of data collection process. Data were collected and analyzed using correlations, regression analysis and descriptive statistics techniques and then interpreted. Data were entered in STATA software for processing and computations.

3.3 Survey Population

The survey population of this study was 21 companies listed in Dar es Salaam stock exchange. A researcher selected companies listed in Dar es Salaam stock exchange as a survey population due to the challenge of getting data from unlisted companies. The study sample was represented by listed manufacturing companies with 30 observations as a panel data, which means six companies for the period of five years, were targeted by a researcher. Sample selected was an appropriate representative of a study population and information from targeted companies was collected from Dar es Salaam stock exchange web site using annual financial statements of manufacturing companies.

3.3.1 Sampling Design and Procedures

Sampling technique of this study was non probability sampling, because the study data used was secondary data which was purposive and quantitative. Non probability Sampling was used because a researcher selected a particular unit of the universe for forming a sample. Six manufacturing companies listed in Dar es Salaam stock exchange from 2009 to 2013 were selected as a sample of the study which created 30 observations making the study sample valid.

3.4 Variables and Measurable Procedures

The dependent variable of this study was company profitability while independent variable was capital structure of companies. The dependent variable was measured using company profitability indicators of return on equity (ROE) and return on asset (ROA) while independent variables were measured using capital structure indicators of total debt to equity ratio, long term debt to equity ratio, short term debt to equity ratio, total debt to asset ratio, long term debt to asset ratio and short term debt to asset ratio

3.5 Methods of Data Collection

Data were collected from the secondary source by reviewing annual financial statements of listed manufacturing companies listed in Dar es Salaam stock exchange. Annual statements collected by a researcher were audited balance sheets and income statements from DSE web sites. A panel data of six manufacturing companies from 2009 up to 2013 were used as a targeted sample which created 30 observations. Observations of a study justified the use of Sample selected by a researcher

All financial ratios were computed on the basis of book value. Chisti (2013) included ten automobile companies as his study sample for five year period from 2007 to 2011.

The data set of his study was completely base on secondary data which was collected from various websites and annual financial reports of the sample firms after searching from the DSE web sites. Researcher collected the financial information from six manufacturing companies for the period from five years (2009-2013) from Tanga Cement limited, TCC, TBL, TATEPA, TOL and Twiga cement limit

3.5.1Sample Size

Sample of this study was (6) six manufacturing companies listed in Dar es Salaam stock exchange from 2009 to 2013. The selected manufacturing companies were observed over five year period from 2009-2013 periods, allowing a researcher to form a panel data of 30 observations to make a sample of this study valid. Awunyo (2012) in Ghana listed banks, used a panel data of seven listed banks as their sample in their study over the period of 10yers from 2000 to 2010 and had 70 observations. Also study by Nimalathan (2007) selected 13 listed manufacturing companies as his panel data from Colombo stock exchange from 2003 to 2007 and made about 65 observations.

Researcher used this technique in order to avoid the problem of using small sample by pooling observations on a cross section of units over several time periods. Researcher collected data from the following companies presented in the table below where company information were collected from annual financial statements of the below companies. Financial statements used for ratio computations were annual balance sheets and company's income statements of manufacturing companies listed in Dar es Salaam Stock Exchange published from 2009 up to 2013.

Table 3.1: Companies Covered in the study

Companies	Abbreviated name	No of years financial data obtained
Tanga Cement	TC	5 years (2009-2013)
Tanzania Breweries Limited	TBL	5 years (2009-2013)
Tanzania Cigarette Corporation	TCC	5 years (2009-2013)
Tanzania Oxygen Limited	TOL	5 years (2009-2013)
Tanzania Tea Packers	TATEPA	5 years (2009-2013)
Twiga Cement	TWC	5 years (2009-2013)

Source: DSE 2015

3.6 Data Processing and Analysis

Data were collected and entered into STATA software program in order to meet the computations of independent variables of capital structure and dependent variables of company profitability. Data were analyzed using multiple regression statistical tools, partial correlations, summary of descriptive statistics and bar graphs used to indicate capital structure and company profitability trend. This study used a panel data of six listed manufacturing companies using a period from 2009 to 2013 to measure the relationship between capital structure and company profitability. The capital structure ratios of TD/EQ, LD/EQ, SD/EQ, TD/AST, LD/AST and SD/AST were independent variables of the study while profitability ratios of ROA and ROE were dependent variables of the study. Researcher adopted the same variables used by Kipesha (2014) who used partial correlations and fixed effect regression model to estimate the impact of capital structure on commercial bank performance in Tanzania. He measured the relationship between capital structure and bank performance using independent variables of TD/EQ, LT/DEQ, STDEQ, TD/AST, LTD/AST, STD/AST and dependent variables of ROE, ROA and EFF. Higgins J (2005) defined multiple regression as a statistical tool that allows a researcher how multiple independent variables are related to a dependent variable. He also defined correlation coefficient as a single summary

number that tells a researcher whether a relationship exists between two variables and whether the relationship is positive or negative. The following base model was used, a multiple regression equation used by a researcher for predictions purpose.

$Y = \lambda + \beta\chi_{it} + \mu_{it}$ Or Y= a + b x

Where, Y is the dependent variable, ʎ is the intercept term, β is a vector of parameters explained on the explanatory variable, Xit is the vector of observations on the explanatory variables, t denotes time period t=1, and i denote cross section i=1The following two regression equations used by the researcher to test the relationship between the variables

Equation 1

$$ROA_{it} = \lambda + \beta_1\chi(TD/EQ)_{it} + \beta_2\chi(LD/EQ)_{it} + \beta_3\chi(SD/EQ)_{it} + \beta_4\chi(TD/AST)_{it} + \beta_5\chi(LD/AST)_{it} + \beta_6\chi(SD/AST)_{it} + \mu_{it}$$

Equation 2

$$ROE = \lambda + \beta_{1+}\chi(TD/EQ)_{it} + \beta_2\chi(LD/EQ)_{it} + \beta_3\chi(SD/EQ) + \beta_4\chi(TD/AST)_{it} + \beta_5\chi(LD/AST)_{it} + \beta_6\chi(SD/AST)_{it} + \mu_{it}$$

Computations of the study variables were done with the help of STATA software computer program which handles panel data analysis. Capital structure ratios and company profitability ratios were computed using data collected from targeted companies. Researcher used the Haussmann test to get an appropriate method of measuring a panel data between random effect and fixed effect regression model. After testing Haussmann, researcher selected fixed effect regression to measure the relationship between capital structure and return on asset and used the random effect method to measure the relationship between capital structure and return on equity.

Researcher used a summary of descriptive statistics to find out the relationship between capital structure ratios and profitability ratios. Moreover, Pearson correlation was used to measure the relationship between independent and dependent variables of the study. Financial statements of Six listed manufacturing companies for the period from 2009 to 2013, and the average values of each item was considered for the purpose of ratio computation before analysis process.

3.6.1Capital Structure and Profitability ratios computations

After computation of the below ratios, the results were entered into ms excel and then transferred into STATA software for further processing and computations. The data acquired were then analyzed using descriptive statistics, correlations and regressions model in order to get the intended results. The following table indicates a method used by a researcher to compute capital structure and profitability ratios of listed manufacturing companies for five years from 2009 up to 2013.

Table3.2: Capital Structure and profitability ratios

Capital structure ratios	Td/Eq	Total debt/Equity×100
	Ld/Eq	Long debt/Equity×100
	Sd/Eq	Short debt/Equity×100
	Td/Ast	Total debt/Assets×100
	Ld/Ast	Long debt/Assets×100
	Sd/Ast	Short debt/Assets×100
Company profitability ratios	ROA	Net income/Assets×100
	ROE	Net income/Equity×100

Source: Researcher 2015

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter discussed about the study findings after analyzing the relationship between capital structure and company profit. Secondary data were collected from annual financial statements of listed manufacturing companies and analyzed in order to get the results. Results were also compared with the previous theories and previous studies.

4.2 Research Findings

Having discussed the methodology for this study in the previous section, Researcher employed descriptive and other inferential statistics in discussing the study findings as presented below. Annual financial statements of listed manufacturing companies were collected from Dar es Salaam stock exchange and analyzed in order to get the results.

Table 4.1: Descriptive Statistics

Variables	Obs	Mean	Std. Deviation	Minimum	Maximum
Return on assets	30	0.1472869	0.1564368	-0.2627663	0.3788781
Return on equity	30	0.1880837	0.3628739	-1.169513	0.5222073
Total debt/Equity	30	1.241381	1.376244	0.2329353	4.897709
Long debt/Equity	30	0.4913901	0.6007895	0.0550804	2.284226
Short debt/Equity	30	0.751243	0.8364858	0.1133146	3.199814
Total debt/Assets	30	0.4351322	0.2135024	0.1889274	0.8304426
Long debt/Assets	30	0.186056	0.1324869	0.032551	0.5194169
Short debt/Assets	30	0.2685662	0.140149	0.919064	0.5483121

Source: Research findings 2015

Researcher analysed the company profitability using two performance indicators of return on equity (ROE) and return on asset(ROA). The capital structure of a company was measured using indicators of total debt to equity (TD/EQ), Long debt to equity(LD/EQ), short debt to equity ratio (SD/EQ) , total debt to asset ratio (TD/AST), Long debt to asset ratio (LD/AST) and Short debt to asset ratio (SD/AST). As indicated in the table above, the mean value of return on assets (ROA) was 0.1473 its standard deviation was 0.1564 and its minimum and maximum value was found to be -0.2628 and 0.3789 respectively. The positive return on assets indicates that some companies were generating profit while negative minimum value was an indication of loss generated by some companies.

The results in table 1 further indicate that return on equity (ROE) ratio had a mean value of 0.1881 and standard deviation of 0.3629. The minimum observed value indicated by return on equity was -1.1695 while the maximum value was 0.5222, positive return on equity means that some manufacturing companies were generating profit (ROE) while negative minimum observed value indicates that some companies were operating at loss. From results in table 1, mean value of return on asset was (14.73%) while the mean value of return on equity was (18.81%), this indicate that contribution of shareholders fund (equity) on generating company income is greater than contribution of company assets in generating company income in five years time. These results also mean that manufacturing companies have less utilization of assets to generate profit than shareholders fund or company equity.

From capital structure ratios, researcher revealed the following results from the descriptive statistics shown in table 1, above. Base on total debt to equity ratio, its greatest mean value of 1.2414 indicates that manufacturing companies depend more on total debt than equity to finance its operations. The greatest proportions of their resources and daily operations were financed by total debt. The greatest standard deviation of 1.3762 signifies a great variation in total debt as evidenced by minimum observed value of 0.2329 against the maximum value of 4.8977.

The results further indicates that if long term to equity ratio is compared to short term debt to equity, manufacturing companies revealed the use of more short term debts to finance operations than long term debts, this results was indicated by less observed mean value of 0.4914, with standard deviation of 0.6008 shown by Long term debt to equity ratio in table 1 above. In case of short term debt to equity ratio, results indicate that manufacturing companies use more short term debts as their source of finance than equity. This is indicated by observed mean value of 0.7512with standard deviation of 0.8365 shown by short term debt to equity ratio. In general, results indicate that manufacturing companies use more short term debts than long term debt to finance their operations due to mean values of ratios shown in table 1. Mean value of 0.7512which is (75.12%) of short term debt used to finance company operations while mean value of 0.4914 which is (49.14%) used to finance company operations.

Findings from debt to asset ratios indicate that the companies use less total debt to finance its assets; this is shown by mean value of 0.4351 (43.51%) with standard deviation of 0.2135 as shown by total debt to asset ratio in table 1.There is also less use of long term debt to finance company assets which is indicated by mean observed value

of 0.1861 (18.61%) with standard deviation of 0.1325 of long term debt to asset ratio in table 1. In terms of Short term debt to assets ratio, companies use less short term debts to finance company assets. This was indicated by the mean value of 0.2686 which is (26.86%) from summary of descriptive statistics with standard deviation of 0.1402. If short term debt is compared with long term debt, short term debt was much used to finance company operations than long term debt. In general, the descriptive statistics above indicate that manufacturing companies depend much on short term debts in their operations if compared with long term debts. This is supported by Also contribution of equity (Shareholders fund) in generating profit (18%) was greater than contribution of asset on generating company profit (14%).

4.2.1 Capital Structure trend of listed manufacturing companies in Tanzania

The company's capital structure trend of manufacturing companies in Tanzania indicated a mixed trend. Some of the companies experienced a considerable rise in the use of debt financing and others experienced a reduction in debt financing. The following tables indicate capital structure ratios trend of six listed manufacturing companies from 2009 to 2013.

Table 4.2: Total debt to equity ratio trend of manufacturing companies

Companies	2009	2010	2011	2012	2013	Average
Tanga cement	0.26	0.42	0.42	0.32	0.32	0.35
TBL	1.22	1.25	0.65	0.70	0.51	0.87
TCC	0.69	0.38	0.38	0.28	0.38	0.42
TOL	0.81	3.45	4.12	4.34	3.25	3.19
TATEPA	0.98	1.37	2.24	1.99	4.90	2.30
Twiga cement	0.36	0.29	0.35	0.35	0.32	0.33
Overall average						1.24

Source: Researcher 2015

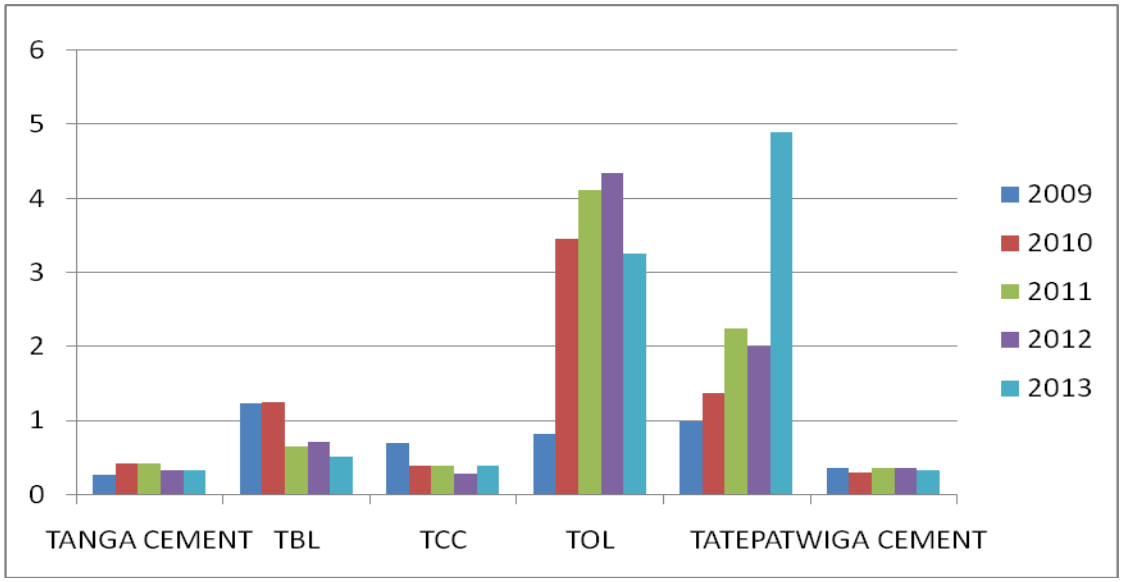
Results from table 4 above show that, three companies of Tanga cement, TATEPA and TOL indicated the rise in the use of debt financing while other companies of TCC, TBL, Twiga and Tanga cement indicated a fluctuations results of falling, rising and constant use of debt financing for some years. TOL have been experiencing the rise in the use of debt financing from the ratio of 0.81 in 2009 up to 4.34 in 2012 and slightly fall in debt financing for the year 2013 with the ratio of 3.25. Moreover, TATEPA have also been experiencing the rise in the use of debt financing from the ratio of 0.98 in 2009 up to the ratio of 4.90 in 2013, with exception of slightly fall in debt financing in the year 2012 (1.99) from the ratio of 2.24 in 2011. Tanga cement indicated a rise in the use of debt financing from 2009 with the ratio of 0.26 up to 2011 with the ratio of 0.42.

Also constant use of debt financing by the company was indicated in 2010 and 2011 with the ratio of 0.42 and in the year 2012 and 2013 with the ratio of 0.32 Twiga cement showed a fluctuation in the use of debt financing where from 2009 to 2010. A company indicated a fall in the use of debt financing from 0.36 in 2009 up to 0.29 in 2010. In the year 2011 and 2012, there was a constant use of debt financing of 0.35, and in 2013 there was a fall in the use of debt from 0.35 in 2012 up to 0.32 in 2013. To summarize the information in table 3, data indicate that Tanzania oxygen limited (TOL) was a company that used huge amount of debt to finance equity if compared with other companies with the ratio of 3.19 that means a company uses more debt as compared with equity or company shareholders fund.

The company that used less amount of debt as compared with equity was Twiga cement limited with the ratio of 0.33 and the overall usage of total debt financing for all

manufacturing companies is 1.24. A company that seems to use an optimal proportion of debt to equity ratio was Tanzania cigarette company (TCC) with the ratio of 0.42. From the above results, it seems that all listed manufacturing companies prefer to use debts to finance their daily operations and their investment process; this was shown by the overall average debt usage of 1.24 indicated in the table above. The trend also indicate that as time goes on debt usage has also been increasing for some companies, example TOL and TATEPA companies indicated an increasing trend of debt usage

Figure 4.1: Total debt to equity trend of manufacturing companies



Source: Researcher 2015

The above results indicate that some listed manufacturing companies used total debt to equity ratio at increasing rate while others showed a decreasing and others showed a constant debt to equity ratio. Tanga cement and Twiga cement indicated a constant use of debt to equity ratio. That means these companies prefer to use the same ratio of debt to equity annually. Tanzania breweries limited (TBL) and Tanzania cigarette company (TCC) indicates a decrease in the use of debt to equity ratio, that means debt to equity ratio have been reduced annually.

Tanzania oxygen limited (TOL) and Tanzania tea packers (TATEPA) have shown the rise in the use of debt to finance equity, except for TOL in the year 2013, there was a drop in the use of debt to equity. If we look at the graph above clearly, majority of the listed manufacturing companies use less debt to finance equity except TATEPA and TOL which indicated a great use of debt as shown in the figure above

Table 4.3: Long term debt to equity ratio trend of manufacturing companies

Companies	2009	2010	2011	2012	2013	Average
Tanga cement	0.15	0.16	0.15	0.13	0.12	0.14
TBL	0.07	0.36	0.29	0.23	0.09	0.21
TCC	0.06	0.07	0.10	0.10	0.08	0.08
TOL	0.23	1.01	1.56	2.29	1.27	1.27
TATEPA	0.50	0.93	1.35	1.02	1.70	1.1
Twiga cement	0.17	0.15	0.14	0.17	0.14	0.77
Overall average						0.60

Source: Researcher 2015

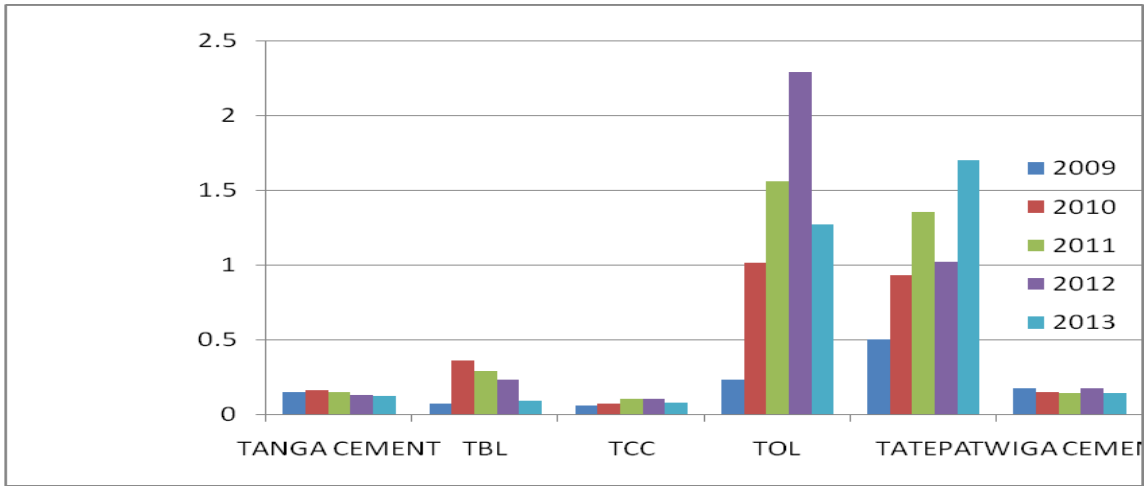
Results of capital structure trend from table 4 above indicate that, long term debt ratios of Tanga cement, TBL, TATEPA and TOL cement have been fluctuating except TCC and Twiga cement which indicated constant debt financing for some years. In the year 2011 and 2012 there was a constant debt financing with the ratio of 0.10 and during 2009 and 2012 Twiga cement indicated the use of constant debt financing of 0.17

Moreover the company that used huge amount of long term debt was Tanzania Oxygen Limited (TOL) with the average ratio of 1.27 and less amount of debt was used by Tanzania Cigarette Company (TCC) with the ratio of 0.008.The overall average long term debt used by all listed manufacturing companies were 0.60 the above results above indicate that three companies of Tanga cement, TBL and TCC used less than 50% of

long term debt to equity, that means companies prefer less long debt finance as compared with equity funds from shareholders

Companies showing increasing trend of using long term debts indicate that they still need more funds to develop their investment projects and increase company value although risk and cost of debt also increases. Decreasing trend of using debt indicate that companies already generating investments while managements were only maintaining the company performance

Figure 4.2: Long term debt to equity ratio trend of manufacturing companies



Source: Researcher 2015

The figure above indicate the less use of long term debt to finance equity by majority of companies from 2009 to 2013, where TCC is a company that used least debt as compared to other companies. Tang cement, TCC, and Twiga cement indicate a constant trend, TBL indicate a decrease trend while TOL and TATEPA show an increase trend of using long term debt. TOL is a company that indicates a huge use of long term debt in the year 2012 and TATEPA is the company that used huge long term debt in the year 2013.

To summarize the above results it seems that most of the manufacturing companies do not prefer long term debt to finance shareholders fund as evidenced from the figure above where only two companies out of four which showed the growth trend of using long term debt, all others showed a less use of debts, decreasing and constant trend. TOL and TATEPA were the companies that used huge long term debt to finance their equity as time goes on, this was an indication of growth for these companies due to their ability of taking risks and having enough collaterals for securing long term loans

Table 4.4: Short term debt to equity ratio trend of manufacturing companies

Companies	2009	2010	2011	2012	2013	Average
Tanga Cement	0.12	0.25	0.27	0.19	0.11	0.19
TBL	1.15	0.90	0.37	0.47	0.42	0.66
TCC	0.64	0.31	0.28	0.19	0.30	0.34
TOL	0.58	2.44	2.57	0.19	1.98	1.55
TATEPA	0.52	0.45	0.88	0.97	3.2	1.20
Twiga Cement	0.19	0.14	0.21	0.19	0.18	0.18
Overall average						0.69

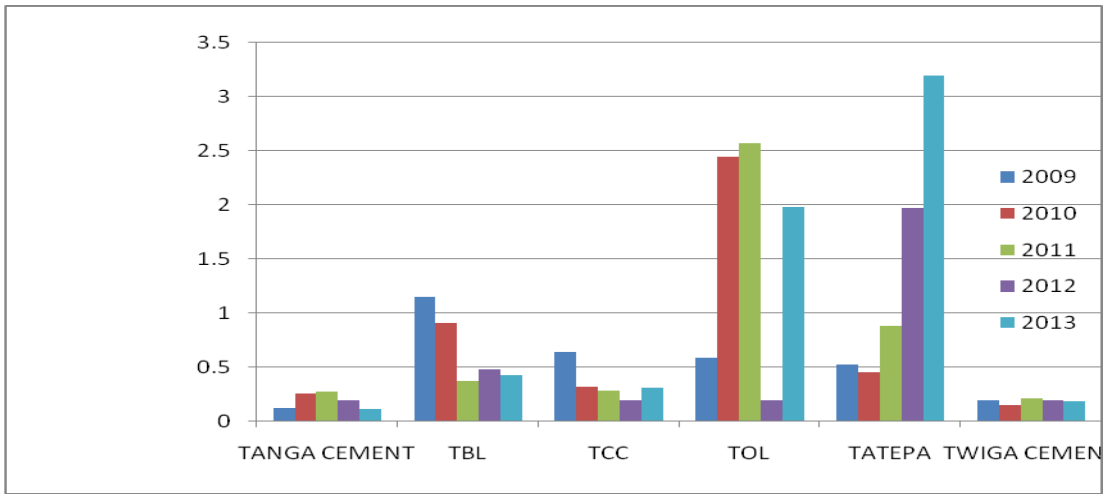
Source: Researcher 2015

Results of capital structure trend from table 5 above indicate that, short term debt ratios of all manufacturing companies above have been fluctuating except Twiga Cement Company limited indicated a ratio of 0.19 in the year 2009 and 2012. Moreover the company that used huge amount of short term debt financing was Tanzania Oxygen Limited (TOL) with the average ratio of 1.55 and less amount of short term debt was used by Tanzania Cigarette Company (TCC) with the ratio of 0.34. The overall average long term debt used by all listed manufacturing companies was 0.69. After long term debt financing was compared with the average short term debt financing of all listed

manufacturing companies, it seems that companies use more short term debts with the average ratio 0.69 if compared with long term debt with 0.60

The above results indicate that Manufacturing companies prefer more short term debts than long term debts to finance equity.

Figure 4.3 Short term debt o equity ratio trend of manufacturing companies



Source: Researcher 2015

The above figure indicate an increasing rate of using short term debt and huge used of short term debts for two companies of TOL and TATEPA while the rest of manufacturing companies indicate a less use of short term debts, decreasing rate and constant use of short term debts to finance equity. TBL and TCC showed a decreasing trend, while Twiga Cement Company and Tanga cement indicated a constant trend in using short term debts.

Again, majority of companies showed a less use of short term debt to finance equity as shown in the above figure. Only two companies of TATEPA and TOL showed the huge use of short term debts to finance equity. From the figures above, if figure 4.2.2

compared with figure 4.2.3, results indicates that most of companies do not prefer both short term debts and long term debts to finance equity, because out of six (6) sampled manufacturing companies, only two companies indicated the higher rate of using short and long term debts.

Table 4.5: Total debt to assets ratio trend of manufacturing companies

Companies	2009	2010	2011	2012	2013	Average
Tanga Cement	0.21	0.29	0.40	0.24	0.19	0.27
TBL	0.55	0.56	0.40	0.41	0.34	0.45
TCC	0.41	0.27	0.27	0.22	0.07	0.25
TOL	0.45	0.78	0.80	0.81	0.76	0.72
TATEPA	0.49	0.58	0.69	0.67	0.83	0.65
Twiga Cement	0.26	0.22	0.26	0.27	0.24	0.25
Overall average						0.43

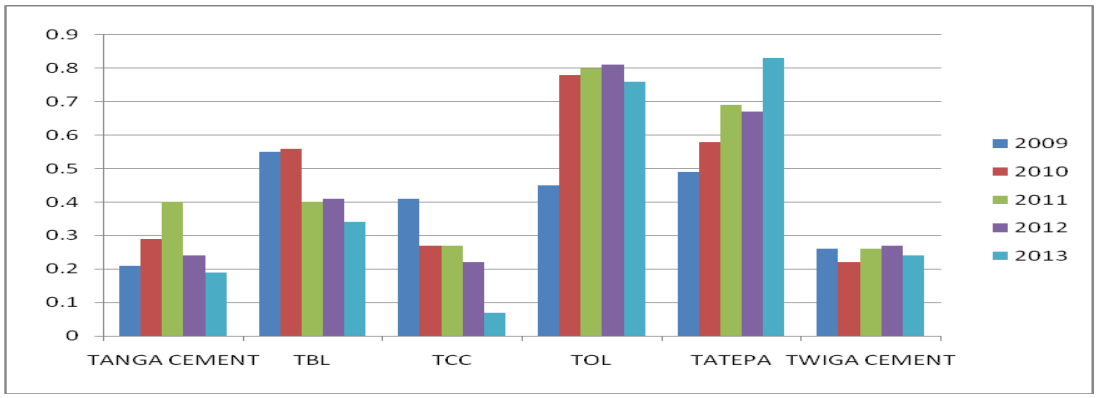
Source: Researcher 2015

Results from table 6 above show that, two companies of TOL and TATEPA indicated the rise in the use of debt financing to finance assets while other companies of TBL and Tanga cement indicated a fluctuations results of falling and rising while reduction in using total debt was shown by TCC. TOL have been experiencing the rise in the use of debt financing from the ratio of 0.49 in 2009 up to 0.81 in 2013 and slightly fall in debt financing in the year 2013 with the ratio of 0.76. Moreover, TATEPA have also been experiencing the rise in the use of debt financing from the ratio of 0.49 in 2009 up to the ratio of 0.83 in 2013, with exception of slightly fall in debt financing in the year 2012 with the ratio of 0.67 from the ratio of 0.69 in 2011.

TCC indicated a reduction in the use of debt financing from the ratio of 0.41 in 2009 up to the ratio of 0.07 in 2013.Twiga cement showed a fluctuation in the use of debt financing to finance assets, except two years of 2009 and 2011 which indicated a constant ratio of 0.26. TBL and Tanga cement indicated a fluctuation results, rise and

fall. To summarize the table 6 above, TOL was the company that used huge amount of debt to finance assets than other companies with the average ratio of 0.72. Twiga and TCC used less amount of debt to finance assets with the average ratio of 0.2.

Figure 4.4: Total debt to assets ratio trend of manufacturing companies



Source: Researcher 2015

The figure above indicate that, most of manufacturing companies use huge amount of debt to finance company assets although some indicated an increasing trend of using debt and others indicated a decreasing trend of using debts and others random trend. Tanga cement indicated a random trend, TBL and TCC indicate a decreasing trend, and TOL and TATEPA indicated a decreasing trend while Twiga cement showed a constant trend in using debt to finance assets.

Table 4.6: Long term debt to asset ratio trend of manufacturing companies

Companies	2009	2010	2011	2012	2013	Average
Tanga cement	0.11	0.11	0.11	0.10	0.10	0.11
TBL	0.03	0.16	0.17	0.13	0.06	0.11
TCC	0.03	0.05	0.07	0.08	0.06	0.06
TOL	0.13	0.23	0.30	0.43	0.30	0.28
TATEPA	0.25	0.40	0.42	0.34	0.29	0.34
Twiga cement	0.13	0.12	0.10	0.13	0.10	0.12
Overall average						0.17

Source: Researcher 2015

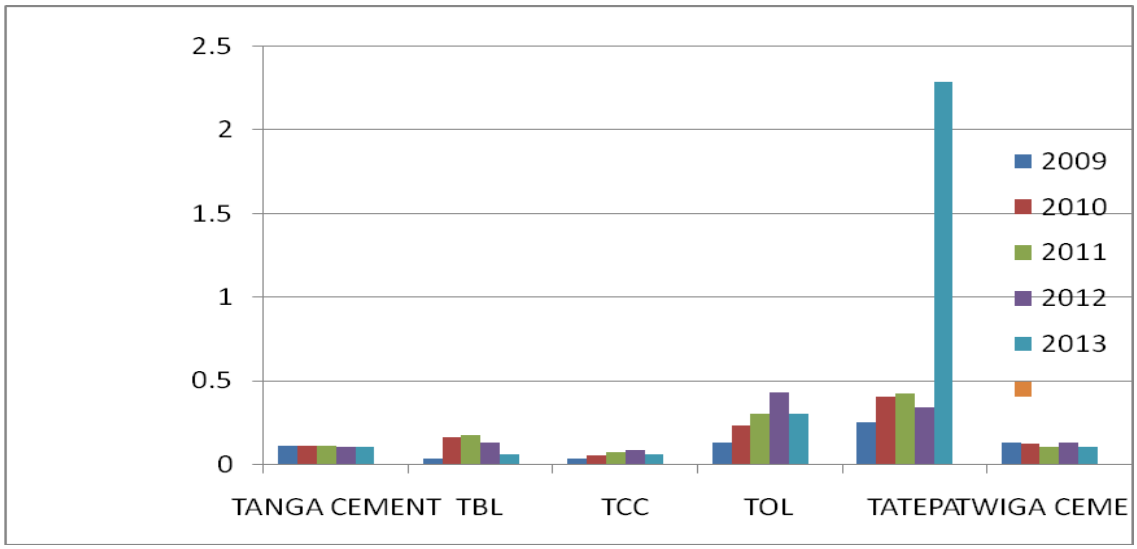
Results of capital structure trend from table 7 above indicate that, TCC have shown a rise in the usage of debt financing from the ratio of 0.03 in 2009 up to 0.08 in 2012, and slightly fall in the in long term debt usage with the ratio of 0.06 in 2013. TOL also experienced a growth in the usage of long term debt financing from the ratio 0.13 in 2009 to the ratio of 0.43 in 2012 with the slightly fall in long term debt usage with the ratio of 0.30 in 2013.

Tanga Cement Company indicates a constant usage of long term debt f from 2009 to 2011 with the ratio of 0.11 and another constant ratio of 0.10 in 2012 and 2013. TBL and Twiga Cement showed a fluctuation results in the usage to long term debt to finance assets. Finally, TATEPA indicates a great use of long term debt if compared with other companies with the average ratio of 0.34 while TCC indicates a less usage of long term debt with the average ratio of 0.06

Evidence also show that manufacturing companies use more short term debt to finance their asset which is indicated by table 4.2.6 below with an overall average of 0.27 than long term debt with the average ratio of 0.17. The overall trend of manufacturing companies above indicates a fluctuation result, which means rise and fall of debt financing by companies. Few companies indicate an increasing trend of using long term debts to finance their assets. For example TOL and TATEPA were the companies that use huge long term debt if compared with other companies from the above table. This is an indication of growth for their companies because debt are used to finance their operations and new investments projects which provide return for the company in future although using huge debts is much riskier, increases bankruptcy costs and cost of debt for the company. Theoretically, debt sage is an advantage for the company because of

tax relief acquired by the company due to interest deducted before company profit generated

Figure 4.5: Long term debt to asset ratio trend of manufacturing companies



Source: Researcher 2015

The above results indicate a less use of long term debt to finance company assets by all manufacturing companies except, TATEPA in 2013. Increasing trend was indicated by TOL while other companies used constant debts although they were still using fewer amounts of long term debts to finance their assets. Tanga cement, TBL, TCC and Twiga cement indicated a constant trend of using debts, and TCC was a company that showed a least use of long term debt to finance its assets.

According to the trend results indicated above, majority of listed manufacturing companies do not prefer long term to finance their assets. In general, these companies prefer to use more long term debts to finance equity than long term debt to finance assets, if figure above 4.2.5 is compared with figure 4.2.2. That means companies prefer to use much long term debts to finance shareholders fund rather than using long term debts to finance their assets

Table 4.7: Short term debt to assets ratio trend of manufacturing companies

Companies	2009	2010	2011	2012	2013	Average
Tanga Cement	0.09	0.18	0.19	0.14	0.09	0.14
TBL	0.52	0.40	0.22	0.28	0.32	0.35
TCC	0.38	0.22	0.20	0.15	0.22	0.23
TOL	0.32	0.55	0.50	0.38	0.47	0.44
TATEPA	0.26	0.19	0.27	0.33	0.54	0.32
Twiga Cement	0.14	0.11	0.16	0.14	0.14	0.14
Overall average						0.27

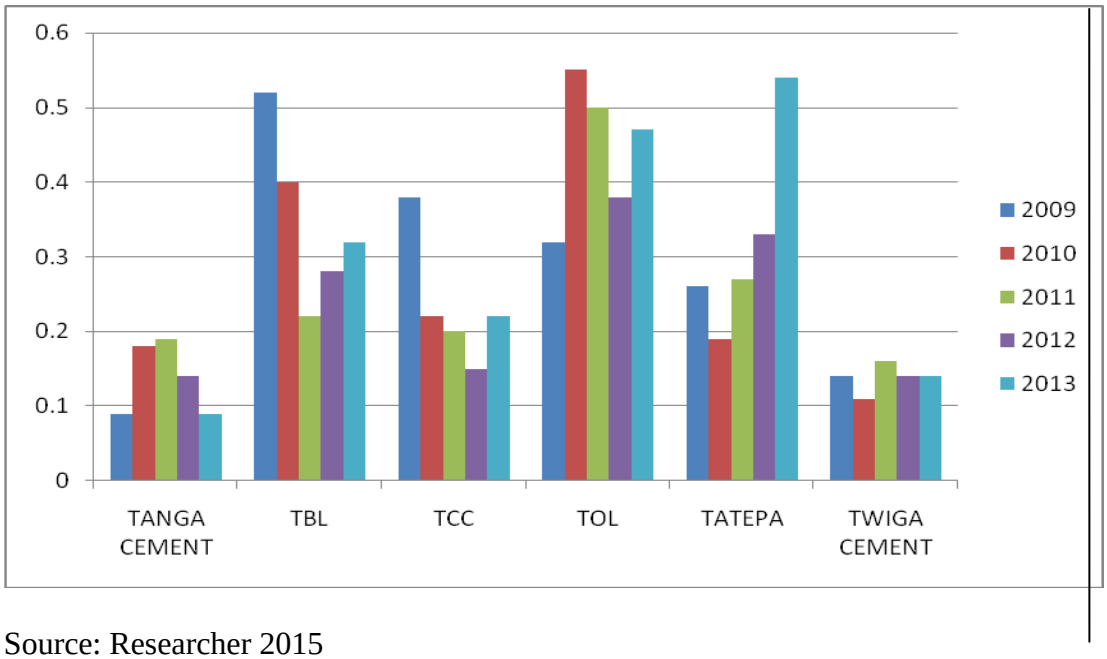
Source: Researcher 2015

Results of capital structure trend from table 8 above indicate that, TCC have shown a fall in the usage of debt financing from the ratio of 0.38 in 2009 up to 0.15 in 2012, and slightly rise in the usage short term debt usage with the ratio of 0.22 in 2013. TATEPA indicated the rise in the in usage of short term debt to finance assets from the ration of 0.26 in 2009 up to 0.54 in 2013, with the exception of fall in debt usage in 2010 with the ratio of 0.19.

Other companies of TBL, Tanga cement and TOL indicated a fluctuation results for the whole period of five years. Finally, TOL indicated a great use of short term debt as compared with other companies with the average ratio of 0.44 while Tanga cement limited and Twiga cement indicated a less usage of long term debt finance with the average ratio of 0.14.

If short term debt to finance assets is used as compared with long term debt, the overall results indicate that manufacturing companies use more short term debts with the average ratio of 0.27 as compared with the long term debt usage with the average usage of 0.17

Figure 4.6.Short term debt to assets ratio trend of manufacturing companies



Source: Researcher 2015

The above results indicate that most of manufacturing companies use more short term debts to finance their assets. This is shown by four companies which uses huge debts out of six sampled companies. TBL, TCC, TOL, and TATEPA showed a great use of short term debts after being compared with other companies of Tanga and Twiga cement. Trending indicated that, TOL and TATEPA had an increasing trend, TBL and TCC show a decreasing trend, Tanga cement indicate a random trend while Twiga cement indicated a constant trend.

At large extent manufacturing companies prefer to finance their assets using short term debts than long term debts. The trend was shown by figure 4.2.5 (Long term debt to assets) after being compared with figure 4.2.6 (Short term debt to assets) above. If all debt ratios to equity and debt to assets compared, conclusion is that listed manufacturing in Tanzania rely more in using short term debts than long term debts to finance their equity and company assets.

4.2.2 Profitability Trend of Listed manufacturing companies in Tanzania

The company's profitability trend of listed manufacturing companies in Tanzania indicated a mixed trend. Some experienced a considerable rise in profitability while experienced a reduction of profit and loss.

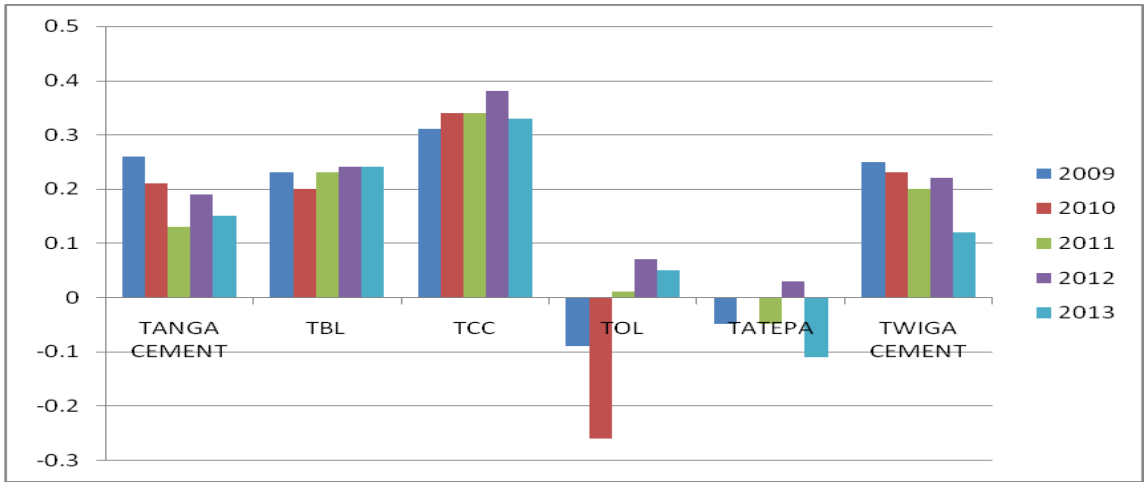
Table 4.8: Return on assets trend of manufacturing companies

Companies	2009	2010	2011	2012	2013	Average
Tanga cement	0.26	0.21	0.13	0.19	0.15	0.19
TBL	0.23	0.20	0.23	0.24	0.24	0.23
TCC	0.31	0.34	0.34	0.38	0.33	0.34
TOL	-0.09	-0.26	0.01	0.07	0.05	-0.04
TATEPA	-0.05	0.001	-0.05	0.03	-0.11	-0.036
Twiga cement	0.25	0.23	0.20	0.22	0.12	0.20
Overall average						0.88

Source: Researcher 2015

Table 10 above indicate a return on assets of listed manufacturing companies in Tanzania, this is the contribution of company assets in profit generation. From above information, Tanga cement experienced a fall in profit from 0.26 in 2009 up to the ratio of 0.13 in 2011. Other companies indicated a fluctuation results for the rest of five years although constant profit generation by companies was shown by TBL in the year 2012 and 2013 with the ratio of 0.24 and TCC also experience constant ratio in the year 2010 and 2011 with the ratio of 0.34. Loss also experienced by TOL in the year 2009 with the ratio of -0.09, 2010 (-0.26) and TATEPA experienced loss in 2009(-0.05), 2011(-0.05) and 2013(-0.11). The overall results indicate that TCC generates more profit if compared with other companies as indicated by the return on assets of 0.34 while TOL experienced a huge loss with the average loss of -0.04, followed by TATEPA(-0.036)

Figure 4.7: Return on assets trend of manufacturing companies



Source: Researcher 2015

The above figure shows that most of manufacturing companies generate huge amount of profit a contributed by their company assets. Three companies of TBL, TCC and TOL indicate some increasing trend while Twiga cement limited and Twiga cement indicated a decreasing trend of profitability. TCC was a company that created highest profit in the year 2012 and TOL created a biggest loss in the year 2010, although in the following years, a company had an increasing profitability trend.

Table 4.9: Return on equity trend of manufacturing companies

Companies	2009	2010	2011	2012	2013	Average
Tanga Cement	0.33	0.30	0.19	0.25	0.19	0.25
TBL	0.52	0.46	0.38	0.41	0.36	0.43
TCC	0.52	0.47	0.47	0.49	0.46	0.48
TOL	-0.17	-1.17	0.07	0.36	0.23	-0.14
TATEPA	-0.11	-0.003	-0.16	0.09	-0.66	-0.17
Twiga Cement	0.34	0.30	0.27	0.28	0.16	0.27
Overall average						0.19

Source: Researcher 2015

Table 11, above indicate a return on equity of listed manufacturing companies in Tanzania, this is the contribution of company shareholders fund in profit generation.

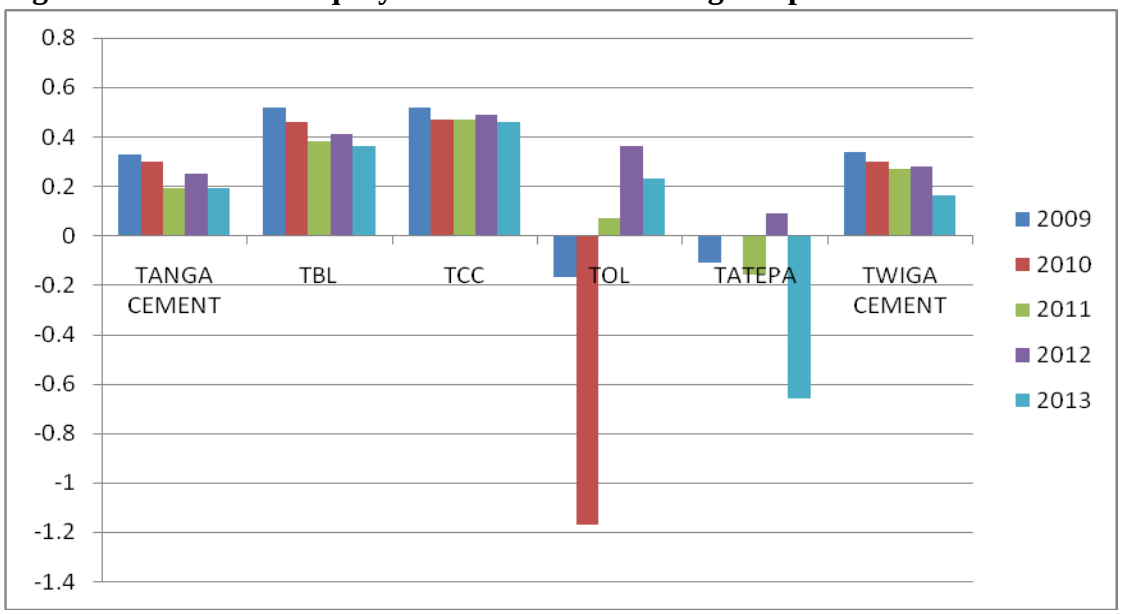
The information indicate that Tanga cement experienced a fall in return on equity from 2009 showing a ratio of 0.33 up to 2013 (0.19) except a slightly rise in return on equity shown in 2012(0.19). TBL experienced a fall in return on equity from the ratio of 0.52 (2009) up to the0.36 in 2013, except a slightly rise of the ratio shown in 2012(0.41)

Fluctuations situations was indicated by TCC, where in the year 2010 and 2011 there was a constant return on equity of 0.47. TOL experienced a loss in the two years of 2009(-0.17) and in 2010(-1.17). TATEPA experienced a loss in 2009(-0.11), 2010(-0.003), 2011(-0.16) and 2013(-0.66). Twiga cement indicated a fall in return on equity from 0.34(2009) to 0.27(2011) the fluctuations results occurred for remaining period of 2012 and 2013.

The overall results indicate that TCC experienced a great return on equity with the average ration of 0.48 and TATEPA and TOL indicated an average loss of -0.17 and -0.14 respectively. For comparison purpose, if performance ratio ROE compared with ROA, listed manufacturing companies seem to acquire higher ratio of ROA with the average ratio of 0.88 if compared with the average ratio of 0.19.In general, both capital structure ratios and profitability ratios of listed manufacturing companies have been showing fluctuation results in Tanzania, there is no clear consistent trend of either increasing or decreasing. Using two performance ratios of return on assets and return on equity, all manufacturing companies were making profit, except TOL and TATEPA who experienced a loss as indicated by the overall average results.

The above table indicates that the all manufacturing companies generate less amount of profit in terms of return on equity for all six sampled companies above. Profit generated by all companies has less than 50% average of return on equity. That means contribution of equity on profit is less for manufacturing companies as compared with return on asset indicated in the table above

Figure 4.8: Return on equity trend of manufacturing companies



Source: Researcher 2015

The above figure indicate that majority of manufacturing companies generate profit as contributed by equity (shareholders fund) except TOL and TATEPA. TOL generated loss in the year 2009 and 2010, the rest of remaining years 2011 up to 2013 a company generated profit while TATEPA generated losses in the year 2009, 2011 and 2013. Profitability trend indicates that only TOL indicated an increasing trend although that company made losses in preceding years, the rest of the remaining companies indicate a decreasing trend of profit generated by equity or shareholders fund. Profitability of manufacturing companies was much generated by company assets than shareholders funds.

Table4.10 Correlation results between capital structure and return on asset

Variable	Correlation	Significance Level
Total debt /equity	0.3033	0.141
Long debt/equity	-0.2705	0.191
Short debt/equity	-0.3215	0.117
Total debt/assets	-0.5977	0.002
Long debt/assets	0.0125	0.953
Short debt/assets	0.5839	0.002

Source: study findings 2015

Above results indicate a negative correlation between long debt to equity and short debt to equity against return on asset while long debt to asset and short term debt to asset indicated a positive relationship with return on asset. Researcher discovered that contribution of company assets to generate profit was greater than shareholders fund.

Table4.11 Correlation results between capital structure and return on equity

Variable	Correlation	Significance Level
Total debt/equity	0.2017	0.331
Long debt/equity	-0.1581	0.450
Short debt/equity	-0.2332	0.262
Total debt/assets	-0.5871	0.002
Long debt/assets	0.0753	0.721
Short debt/assets	0.6531	0.000

Source: study findings 2015

Correlation results above indicate significant negative relationship between debts to equity ratios against return on equity. Researcher also revealed a positive correlation

between debt to asset ratios (long and short debt to asset) and return on equity. Due to the above results, researcher concludes that contribution of assets in profit generation in terms of return on equity was greater than contribution of shareholders fund.

To summarize the partial correlation results above, researcher revealed the mixed results between capital structure and performance of listed manufacturing companies. Some variables indicated a positive correlation and others indicative a negative correlation results. Researcher recommends to managements of listed manufacturing companies in Tanzania to rely much on resources or assets as a guide for their debts because they have positive correlation with company profit in terms of both return on assets and return on equity. Researcher recommend to managers of listed manufacturing companies to rely on debt to assets ratios, especially short debt to assets ratios because they indicated a greater positive correlation with all profitability indicators than other variables. From the above results, positive correlation results between short debt to assets and return on equity is 0.6531 while positive correlation between short debt to assets and return of asset is 0.583

Housman and regression results (Capital structure variables vs. Return on asset)

Researcher used Housman test to test for appropriate method to use between fixed and random effect regression. Researcher used Housman statistical technique in order to avoid errors when testing the relationship between capital structure variables and profitability variable of return on assets (ROA). After testing, Researcher got the following Housman and regression results below.

Table 4.12 Housman test results (Fixed Vs Random effect regression method)

Variables	Coefficient (f e), b	Coefficients (r e), B	(b-B)
Total/Equity	-0.3528801	3.97227	-4.32515
Long/Equity	0.5213898	-3.538455	4.059844
Short debt/Equity	0.2686853	-4.24231	4.510995
Total debt/Assets	-0.2221991	-1.938838	1.716639
Long debt/Assets	0.1185286	0.014474	0.1040546
Short debt/Assets	0.1683276	2.252587	-2.08426
	Chi 2(6)=(b-B)=42		
	Prob>chi2=0.0000		

Source: Research findings 2015

Haussmann test results in the table above supported the use of fixed effect regression model because p- value (0.0000) indicated above is less than confidence level of 0.05.

Table 4.13 Fixed effect regression results (Capital Structure Vs Return on Assets)

Return on assets	coefficient	Std error	t	P > I t I	95% confidence
Total debt/Equity	-0.352880	2.074418	0.17	0.867	-4.711071
Long debt/Equity	0.5213898	2.056519	0.25	0.803	-3.799197
Short debt/Equity	0.2686853	2.087685	0.13	0.899	-4.117377
Total debt/Equity	-0.222199	0.5572327	-0.40	0.695	-1.392902
Long debt/Assets	0.1185286	0.1730035	0.69	0.502	-0.244938
Short/Assets	0.1683276	0.6396691	0.26	0.125	-1.1755

Source: Study findings 2015

From the above results, Researcher discovered two types of study findings after using fixed effect regression model. The first test result in the table above indicated a significant negative relationship between Return on asset (ROA) and capital structure variables of total debt to equity (TD/EQ) and total debt to asset (TD/AST) at -0.3529 and -0.2222 respectively. These results were against the trade off theory of capital structure which supports the influence of company debt on generating profit.

These study findings indicating the negative relationship between capital structure variables and dependent variable of return on asset (ROA) were consistent with previous studies by Abbasali (2012) who measured the relationship in Tehran using Pearson correlation and multiple regression models, Odita (2012) who tested the relationship in Nigerian firms using Pearson correlation, Alawwad (2013) in Saudi Arabia, and Toraman (2013) in Turkey. Also positive relationship results were consistent with Zuraidah (2012) in Malaysian firms, Narayanasamy (2015) in Malaysia, Goyal (2013) in India and other studies with similar results.

Moreover, the second type of study results indicated a positive relationship between return on asset (ROA) and capital structure variables of Long term debt to equity (LD/EQ) at 0.5214, short term debt to equity (SD/EQ) at 0.2687, long term debt to asset (LD/AST) at 0.1185 and Short term debt to asset (SD/AST) at 0.1683. The second group of study results supported the application of trade off theory which clarifies the influence of debt on profit generation. The results also indicate that Long term debt to equity ratio (LD/EQ) has a great positive effect on firm profitability as indicated by 0.5214 confidence level. The study results indicating positive relationship were consistent with trade off theory which supports the use of leverage as an indicator of profit generation while the negative relationship between the variables rejects the

application of trade of theory. Due to above results, researcher discovered that there is a positive relationship between capital structure of manufacturing companies and their profit (ROA) because both long term and short term debt ratios had a positive relationship with return on assets. That means the greater the capital structure ratio kept by a company the greater the profitability in terms of return on assets and the lesser the ratio kept by a company the lesser the profit to be acquired by that company.

The overall results of this study which revealed the positive relationship between the variables were consistent with previous studies conducted by Hughes (2013) using listed firms in Ghana, Uremagu (2012) Olalebe (2013) and Adesina (2015) in Nigerian companies and priya (2013) tested such relationship between capital structure and performance using listed companies in Ghana, their studies revealed that profit depends on capital structure.

Housman and Regression results (Capital Structure Vs Return on Equity

Researcher used Housman test to test for appropriate method to use between fixed and random effect regression. Researcher used Housman statistical technique in order to avoid errors when testing the relationship between capital structure variables and profitability variable of return on equity (ROE). The following regression results and Housman test results were discovered by a researcher after testing. Housman test assisted a researcher to know the regression method which tested the relationship between capital structure and profitability of manufacturing companies listed in Dar es Salaam stock exchange**.** Six capital structure variables which were treated as independent variables were tested against dependent variable of return on equity in order to analyze the relationship between capital structure and company profit.

Table 4.14 Housman test results (Fixed Vs Random effect regression method)

Variables	Coefficient (f e), b	Coefficients (re), B	(b-B)
Total debt/Equity	-3.857744	6.70211	-10.55985
Long debt/Equity	4.866519	-5.230258	10.09678
Short debt/Equity	3.077945	-7.773576	10.85152
Total debt/Asset	-1.379302	-4.893065	3.513763
Long debt/Asset	0.252409	0.2260395	0.026370
Short debt/Asset	3.171389	7.00877	-3.837381
	Chi 2 (6)=10.67		
	Prob >chi2=0.0991		

Source: Research findings 2015

Housman test results above supported the use of random effect regression model since the p- value 0.0991 was greater than confidence level of 0.05

Table 4.15 Regression results (Capital structure Vs Return on equity)

Return on equity	Coefficients	Std error	z	p>I z I	95% confidence
Total debt/Equity	6.70211	6.751746	0.99	0.321	-6.531068
Long debt/Equity	-5.230258	6.812504	-0.77	0.443	-18.58252
Short debt/Equity	-7.773576	6.75916	-1.15	0.250	-21.02129
Total debt/Assets	-4.893065	1.406882	-3.48	0.001	-7.650502
Long debt/Assets	0.2260395	0.6244482	0.36	0.717	-0.9978565
Short debt/Assets	7.00877	1.694554	4.14	0.000	3.687506

Source: Research findings 2015

The study results in a table above, on the relationship between capital structure and firm profitability in terms of return on equity indicate a significant negative relationship with capital structure ratios of long term debt to equity (LD/EQ) at -5.2303, Short term debt to equity (SD/EQ) at -7.7736 and Total debt to asset at -4.8931. On the other side the above results in table 6 indicate that return on equity had a positive relationship with total debt to equity ratio (TD/EQ) at coefficient of 6.7021, Long term debt to asset (LD/AST) at 0.2260 and Short term debt to asset at coefficient of 7.0088. Results showing the positive relationship between debt ratios and profitability ratio of ROE, support the application of trade off theory which encourages the influence of debt on firm profit generation while the results showing the negative relationship between debt ratios variables and profitability ratio of ROE, rejects the application of trade off theory.

The study findings indicated the negative relationship between capital structure variables against profitability variable of return on equity (ROE) were consistent with previous studies by Chisti (2013) in India, Marietta (2012) in Kenya, Shubita (2012) in Jordan and Feng (2013) in Sweden. Also results indicated the positive relationship between capital structure variables against profitability measure of return on equity (ROE) were consistent with previous studies by Uremagu (2012) in Nigeria, Priya (2013) in Srilanka, Naidu (2011) in South Africa.

From the above results, two contradicting results occurred because capital structure measures of long term debt to equity (LD/EQ), short term debt to equity (SD/EQ) and total debt to asset (TD/AST) indicated a negative relationship with performance measure of return on equity (ROE) at -5.2303 coefficient, -7.7736 coefficient and -4.8931 respectively while other remaining capital structure measures of total debt to

equity(TD/EQ), long term debt to asset(LD/AST) and short term debt to asset (SD/AST) indicated a positive relationship against return on equity(ROE) at coefficients of 6.7021, 0.2260 and 7.0088 respectively.

These results also indicate that short term debt to assets ratio had a great positive relation with return on equity at 7.0088 confidence level. For that case, short term debts to assets are the most influential ratio on profit generation of manufacturing companies. The partial correlations results supported the fixed effect regression through the ratio of total debt to asset ratio where both methods indicate a negative relationship between total debt to asset ratio against return on equity and return on asset. That means return on assets indicated a higher amount of profit than return on equity. To summarize the above results, researcher revealed two kinds of results; first results indicated a negative relationship between debt to equity ratios and return on equity while the second type of results indicated a positive relationship between debt to asset ratios and return on equity. Second results were consistent with the trade off theory while the first results were against theory.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this final part of the dissertation, conclusions and recommendations are given based on the results and the analysis of data collected from the field. The suggestions of the possible solutions to the research problem are also given in this chapter. Finally, researcher suggests the area for further study in order to assist others who will be in a position to conduct studies by referring this study

5.2 Conclusion

This study used panel data of 6 manufacturing companies for the period of 5 years creating 30 observations of the data. Researcher analyzed the relationship between capital structure variables (independent variables) against profitability variables (dependent variable). Fixed effect regression method was used to measure the relationship between capital structure and return on asset (ROA) while random effect regression model used to test the relationship between capital structure and return on equity of manufacturing companies (ROE). Moreover, partial correlation technique also used to measure the relationship between the study variables in order to support the regression results.

After testing the relationship, researcher revealed the mixed results between capital structure variables and company profitability that means some capital structure variables indicated a negative relationship with company profitability variables while other capital structure variables indicated a positive relationship with profitability variables. Long term debt ratios and short term debt ratios were used as capital structure

indicators of manufacturing companies. The random effect regression results indicated a negative relationship between Long term debts to equity (LD/EQ) against return on equity (ROE) at a coefficient of -5.2303 which was also supported by partial correlation results at -0.1581. In terms of short term debt to equity (SD/EQ) against return on equity (ROE), random effect regression results also indicated a negative relationship at -7.7736 which was supported by partial correlations results at -0.2303.Both long term debt and short term debt to equity indicated a negative relationship with return on equity, that means there is no relationship between capital structure and company profitability in terms of return on equity.

Fixed effect regression results indicated a positive relationship between short term debt to assets and return on asset at 0.1683 coefficient level .These results were supported by partial correlation results .Except negative results indicated between long term to equity and short term to equity against return on assets. The positive relation between the variables is consistent with the trade of theory and other previous empirical studies by Abiodum (2012) in Ukraine, and Soyebo (2014) in Nigerian firms. The negative relationship between the variables is consistent with Leon (2013) who used to study manufacturing firms in Sri- Lanka, Tailab (2014) who tested the relationship in American companies, and Lavorskyi (2013) in Ukraine.

Finally this study revealed that, capital structure of listed manufacturing companies in Tanzania affect company profitability in terms of return on assets positively. On the other side, capital structure of listed manufacturing companies has negative relationship with company profit in terms of shareholders fund or return on equity. The results indicate that debt usage has more advantage for companies that depend much on assets

to generate profit than those that depend much on equity or shareholders fund to generated company profit

5.3 Recommendations

To improve the profitability of listed manufacturing companies in Tanzania, the following recommendations have to be observed. The company management of listed manufacturing companies should increase the use more short term debt to asset ratios because they have much influence on company profitability in terms of both return on equity and return on assets if compared with other capital structure ratios.

Moreover, investors of listed manufacturing companies in Tanzania should review the capital structure of companies before investing in them because the strength of a company capital mix determines the level of returns. More companies in Tanzania should put their financial information through Dar es Salaam stock exchange in order to allow investors to review their capital structure and attracts more investors in their companies

5.4 Area for Further Study

A study should be taken to analyze the effect of capital structure on profitability of other companies, especially financial companies, service companies and non listed companies. In addition, future studies could be done to analyze the determinants of capital structure in Tanzania companies. Moreover, study on relationship between the capital structures of Tanzanian companies and companies of other nations should be done.

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APPENDICES

Regression results (Capital structure Vs Return on Assets /Return on Equity)

```
Fixed-effects (within) regression               Number of obs      =        30
Group variable: cpycode                         Number of groups   =         6

R-sq:  within  = 0.3968                         Obs per group: min =         5
       between = 0.7072                                        avg =       5.0
       overall = 0.0432                                        max =         5

                                                F(6,18)            =      1.97
corr(u_i, Xb)  = -0.4766                        Prob > F           =    0.1233
```

roa	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
tdeq	-.3528801	2.074418	-0.17	0.867	-4.711071	4.005311
ldeq	.5213898	2.056519	0.25	0.803	-3.799197	4.841977
sdeq	.2686853	2.087685	0.13	0.899	-4.117377	4.654748
tdast	-.2221991	.5572327	-0.40	0.695	-1.392902	.9485033
ldast	.1185286	.1730035	0.69	0.502	-.2449383	.4819954
sdast	.1683276	.6396691	0.26	0.795	-1.175567	1.512223
_cons	.1567177	.0973329	1.61	0.125	-.0477712	.3612067
sigma_u	.17800558					
sigma_e	.06092397					
rho	.89514211	(fraction of variance due to u_i)				

```
F test that all u_i=0:     F(5, 18) =      7.12                 Prob > F = 0.0008

. estimates store fe

. xtset cpycode year
       panel variable:  cpycode (strongly balanced)
        time variable:  year, 2009 to 2013
                delta:  1 unit

.
. xtreg  roa tdeq ldeq sdeq tdast ldast sdast, re

Random-effects GLS regression                   Number of obs      =        30
Group variable: cpycode                         Number of groups   =         6

R-sq:  within  = 0.0770                         Obs per group: min =         5
       between = 0.9282                                        avg =       5.0
       overall = 0.7198                                        max =         5

Random effects u_i ~ Gaussian                   Wald chi2(6)       =     59.08
corr(u_i, X)       = 0 (assumed)                Prob > chi2        =    0.0000
```

roa	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
tdeq	3.97227	2.602154	1.53	0.127	-1.127857	9.072397
ldeq	-3.538455	2.62557	-1.35	0.178	-8.684478	1.607568
sdeq	-4.24231	2.605011	-1.63	0.103	-9.348038	.8634178
tdast	-1.938838	.5422186	-3.58	0.000	-3.001567	-.8761093
ldast	.014474	.2406652	0.06	0.952	-.4572211	.4861691
sdast	2.252587	.6530887	3.45	0.001	.9725568	3.532618
_cons	.3779432	.0672998	5.62	0.000	.2460381	.5098484
sigma_u	0					
sigma_e	.06092397					
rho	0	(fraction of variance due to u_i)				

```
. estimates store re

. xtset cpycode year
       panel variable:  cpycode (strongly balanced)
        time variable:  year, 2009 to 2013
                delta:  1 unit

.
. Hausman fe re
unrecognized command:  Hausman not defined by Hausman.ado
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. hausman fe re
```

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
tdeq	-.3528801	3.97227	-4.32515	.
ldeq	.5213898	-3.538455	4.059844	.
sdeq	.2686853	-4.24231	4.510995	.
tdast	-.2221991	-1.938838	1.716639	.1284807
ldast	.1185286	.014474	.1040546	.
sdast	.1683276	2.252587	-2.08426	.

```
                b = consistent under Ho and Ha; obtained from xtreg
     B = inconsistent under Ha, efficient under Ho; obtained from xtreg

  Test:  Ho:  difference in coefficients not systematic

              chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =       42.02
            Prob>chi2 =      0.0000
            (V_b-V_B is not positive definite)

.
```

```
Fixed-effects (within) regression               Number of obs      =        30
Group variable: cpycode                         Number of groups   =         6

R-sq:  within  = 0.5274                         Obs per group: min =         5
       between = 0.6161                                        avg =       5.0
       overall = 0.0396                                        max =         5

                                                F(6,18)            =      3.35
corr(u_i, Xb)  = -0.4024                        Prob > F           =    0.0215

------------------------------------------------------------------------------
         roe |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        tdeq |  -3.857744    7.57752    -0.51   0.617    -19.77752    12.06204
        ldeq |   4.866519   7.512139     0.65   0.525     -10.9159    20.64894
        sdeq |   3.077945    7.62598     0.40   0.691    -12.94364    19.09954
       tdast |  -1.379302   2.035483    -0.68   0.507    -5.655692    2.897089
       ldast |   .2524099   .6319543     0.40   0.694    -1.075277    1.580097
       sdast |   3.171389    2.33661     1.36   0.191    -1.737646    8.080424
       _cons |  -.0251421   .3555418    -0.07   0.944    -.7721077    .7218235
-------------+----------------------------------------------------------------
     sigma_u |   .36398734
     sigma_e |   .22254558
         rho |   .72789609   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(5, 18) =     1.81                 Prob > F = 0.1623

. estimates store fe

. xtset cpycode year
       panel variable:  cpycode (strongly balanced)
        time variable:  year, 2009 to 2013
                delta:  1 unit

.
. xtreg  roe tdeq ldeq sdeq tdast ldast sdast, re

Random-effects GLS regression                   Number of obs      =        30
Group variable: cpycode                         Number of groups   =         6

R-sq:  within  = 0.3880                         Obs per group: min =         5
       between = 0.9574                                        avg =       5.0
       overall = 0.6494                                        max =         5

Random effects u_i ~ Gaussian                   Wald chi2(6)       =     42.60
corr(u_i, X)       = 0 (assumed)                Prob > chi2        =    0.0000

------------------------------------------------------------------------------
         roe |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        tdeq |    6.70211   6.751746     0.99   0.321    -6.531068    19.93529
        ldeq |  -5.230258   6.812504    -0.77   0.443    -18.58252    8.122004
        sdeq |  -7.773576    6.75916    -1.15   0.250    -21.02129    5.474134
       tdast |  -4.893065   1.406882    -3.48   0.001    -7.650502   -2.135628
       ldast |   .2260395   .6244482     0.36   0.717    -.9978565    1.449936
       sdast |    7.00877   1.694554     4.14   0.000     3.687506    10.33003
       _cons |   .4829092   .1746211     2.77   0.006     .1406581    .8251604
-------------+----------------------------------------------------------------
     sigma_u |           0
     sigma_e |   .22254558
         rho |           0   (fraction of variance due to u_i)
------------------------------------------------------------------------------

. estimates store re

. hausman fe re

                 ____ Coefficients ____
                    (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
                     fe           re       Difference          S.E.
-------------+----------------------------------------------------------------
        tdeq |  -3.857744     6.70211      -10.55985       3.439876
        ldeq |   4.866519   -5.230258       10.09678       3.165757
        sdeq |   3.077945   -7.773576       10.85152       3.531195
       tdast |  -1.379302   -4.893065       3.513763       1.471011
       ldast |   .2524099    .2260395       .0263703       .0971115
       sdast |   3.171389     7.00877      -3.837381       1.608799
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       10.67
                Prob>chi2 =      0.0991
                (V_b-V_B is not positive definite)

.
```

Partial correlation results

```
. pcorr roa tdeq ldeq sdeq tdast ldast sdast
(obs=30)

Partial correlation of roa with

    Variable |     Corr.      Sig.
-------------+------------------------
        tdeq |     0.3033     0.141
        ldeq |    -0.2705     0.191
        sdeq |    -0.3215     0.117
       tdast |    -0.5977     0.002
       ldast |     0.0125     0.953
       sdast |     0.5839     0.002

Partial correlation of roe with

    Variable |     Corr.      Sig.
-------------+------------------------
        tdeq |     0.2027     0.331
        ldeq |    -0.1581     0.450
        sdeq |    -0.2332     0.262
       tdast |    -0.5871     0.002
       ldast |     0.0753     0.721
       sdast |     0.6531     0.000
```

Summary of descriptive statistics

```
. summarize roa roe tdeq ldeq sdeq tdast ldast sdast

    Variable |        Obs        Mean    Std. Dev.       Min        Max
-------------+---------------------------------------------------------
         roa |         30    .1472869    .1564368  -.2627663   .3788781
         roe |         30    .1880837    .3628739  -1.169513   .5222073
        tdeq |         30    1.241381    1.376244   .2329353   4.897709
        ldeq |         30    .4913901    .6007895   .0550804   2.284226
        sdeq |         30     .751243    .8364858   .1133146   3.199814
-------------+---------------------------------------------------------
       tdast |         30    .4351322    .2135024   .1889274   .8304426
       ldast |         30     .186056    .1324869    .032551   .5194169
       sdast |         30    .2685662    .1401949   .0919064   .5483121
```

Pictures of listed manufacturing company's financial statements for the year 2013

TANZANIA BREWERIES LIMITED

STATEMENT OF FINANCIAL POSITION
As at 31 MARCH 2013

	2013 TShs' M	2012 TShs' M	% Change
ASSETS			
Non-current assets			
Property, plant and equipment	**425,680**	363,298	
Intagible assets	**49,344**	40,943	
Investments	**88**	88	
Prepaid lease	**982**	993	
	476,094	405,322	17%
Current assets			
Inventories	**126,447**	127,859	
Accounts receivable	**86,357**	55,130	
Bank and cash balances	**49,442**	100,509	
	262,246	283,498	
Total assets	**738,340**	688,820	7%
EQUITY			
Capital and reserves attributable to the Company's equity holders			
Share capital	**29,493**	29,493	
Share premium	**45,346**	45,346	
Retained earnings	**415,266**	336,410	
Other reserves	**(13,195)**	(12,209)	
	476,910	399,040	
Non-controlling Interests	**10,683**	6,070	
Total equity	**487,593**	405,110	20%
LIABILITIES			
Non-current liabilities			
Borrowings	**1,875**	57,725	
Deferred income tax liabilities	**41,415**	33,962	
Provisions	**447**	493	
	43,737	92,180	
Current liabilities			
Trade and other payables	**129,515**	167,089	
Borrowings	**71,723**	19,140	
Income tax payable	**5,772**	5,301	
	207,010	191,530	
Total liabilities	**250,747**	283,710	
Total equity and liabiltities	**738,340**	688,820	7%

TANZANIA BREWERIES LIMITED

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME
For the Year ended 31 March 2013

	Group		% Change
	2013	2012	
	TShs' M	TShs' M	
Revenue	**892,017**	800,948	11%
Cost of sales	**(449,827)**	(407,575)	
Gross profit	**442,190**	393,373	12%
Selling and distribution costs	**(126,719)**	(109,856)	
Administrative expenses	**(52,872)**	(49,061)	
Other (expenses)/income	**(3,804)**	7,009	
Derivative income/(losses)	**4,397**	(2,177)	
Operating profit	**263,192**	239,288	10%
Finance income	**8,215**	9,534	
Finance costs	**(17,594)**	(10,594)	
Profit before income tax	**253,813**	238,228	7%
Income tax expense	**(76,685)**	(71,813)	
Profit for the year	**177,128**	166,415	6%
Other comprehensive income:			
Cash flow hedges:			
Fair value gains transferred to receivables	**494**	-	
Fair value losses transferred to payables	**(1,532)**	-	
Total Comprehensive Income	**176,090**	166,415	
Attributable to:			
Non-controlling Interests	**9,741**	7,693	
Equity holders of the company	**166,349**	158,722	
	176,090	166,415	
Basic earnings per share (Tshs)	**579.0**	542.7	7%
Diluted earning per share (Tshs)	**567.4**	538.2	5%
Dividend per share (Tshs)	**300.0**	200.0	50%

SIMBA CEMENT

AUDITED RESULTS FOR THE YEAR ENDED 31 DECEMBER 2013

CHAIRPERSON'S STATEMENT

Introduction
During 2013 Tanga Cement Company Limited (TCCL) celebrated some significant milestones and successes in executing its strategy and living up to its brand promise of being the 'Pride of the Nation'. We are proud of our contribution towards the development of Tanzania and more importantly to the lives of the many people we are able to touch and enhance due to our business activities.

Macro-Economic Overview
Tanzania has continued to maintain overall macroeconomic stability, which has been a fundamental factor behind the positive economic growth. Demand for cement products, both locally and from the export markets, remains high. Despite the increase in low-priced imports and changes in the competitive landscape, our high-quality products and sound relationships with customers enabled us to thrive in the fiercely competitive environment. We will continue to improve on our quality and service offering in order to maintain market share and sales performance.

Inflation declined from last year, to an annual rate of 5.6%, while the steady exchange rate helped by providing a degree of stability in the costs of our clinker and other imported materials.

Historical sales and distribution performance
The past year was characterised by challenging trading conditions in the local market. This was mainly due to increased competition as a result of growing cement imports. Although the economy of Tanzania continued to expand during the period under review and the macro-economic climate was generally favourable, the additional market demand created was captured by importers rather than the local cement manufacturers.

As a result, sales volumes, as well as the selling prices achieved, were lower than expected and both sales volumes and total sales revenue were lower than those achieved over the same period in 2012.

I would like to commend the management and staff of TCCL for their positive achievements during the year and urge them to keep up the great performance.

A major milestone achieved during the year was the acquisition of an additional 40% shareholding in CDEAL, giving the company full ownership of the sales and distribution arm of the business. The acquisition will ensure improved integration and strategic alignment with TCCL.

Strategic changes in the sales and marketing of TCCL's products have been effected following the takeover of CDEAL.

Operational overview
Improving operational efficiencies and containing production costs were a major focus in 2013 and significant successes were achieved, particularly during the second half of the year. In addition, the company secured the supply of coal from local sources and entered into negotiations for a long-term purchase agreement for clinker, both of which will add to the cost containment efforts.

The kiln performed well during the year and experienced no major mechanical problems, with the only stoppages being for planned maintenance. Clinker production volumes increased by 1.7% compared to the previous year.

The company's operating profit for the year decreased by 5.1%, whilst net profit after tax decreased by 5.4%.

Future Outlook
In August 2013, TCCL celebrated the start of the construction phase of the second kiln line with a ground-breaking ceremony.

The new kiln will enhance the company's competitive advantage. Once completed, the kiln will increase the company's clinker production capacity by 750,000 tons per annum, more than doubling its current clinker capacity.

With commissioning expected during the second half of 2015, the additional capacity will help the company to meet the growing demand for cement both in Tanzania and in markets beyond the country's borders.

We look forward to the future value the company will derive from this substantial investment.

Dividends
The board has recommended a final dividend of Tzs 60 per share (2012: Tzs 55). Amounting to a total final dividend of Tzs 3.8 billion. This brings the accumulated dividend for the year to Tzs 110 per share (2012: Tzs 100), a total of Tzs 7 billion for the full year.

Closure of the Share Register
The register of members will close on 25 April 2014. The last day for trading cum-dividend will be 22 April 2014 and the final dividend will be paid on or about 31 May 2014.

Conclusion
After joining the TCCL family in August 2012 to oversee the construction of a second kiln line, Mr Reinhardt Swart was appointed as the Managing Director of Tanga Cement Company Limited in July 2013. I would like to use this opportunity to thank Mr Swart for his contribution towards the success of the company within a short period of time. We look forward to the new heights TCCL will reach under his leadership.

On behalf of the Board of Directors, I would like to thank the employees of Tanga Cement Company Limited for the passion they have for the company and for their commitment to ensuring its continued prosperity.

We look forward to celebrating many successes together in 2014.

Mr. Lawrence Masha
Chairperson

Consolidated Statement of Comprehensive Income
for the year ended Dec'2013

	Company Dec'2013 Tzs'000	Company Dec'2012 Tzs'000	Group Dec'2013 Tzs'000	Group Dec'2012 Tzs'000
Revenue	182,784,033	195,603,983	233,060,598	257,921,831
Cost of sales	(120,063,342)	(129,895,517)	(161,388,119)	(178,537,803)
Gross profit	**62,720,691**	**65,708,466**	**71,672,479**	**79,384,028**
Other operating expenses	(1,058,553)	(991,434)	(1,345,531)	(1,282,883)
Selling and administrative expenses	(11,999,196)	(10,403,741)	(18,261,593)	(16,971,927)
Depreciation and amortization	(5,778,295)	(5,133,902)	(6,052,769)	(5,462,771)
Net profit from operations	**43,884,647**	**49,179,389**	**46,012,586**	**55,666,447**
Other Income	1,790,400	1,796,386	-	113,386
Net finance costs	370,171	295,898	311,183	153,234
Net profit before taxation	**46,045,218**	**51,271,673**	**46,323,769**	**55,933,067**
Taxation	(13,588,984)	(16,772,541)	(14,158,879)	(18,819,650)
Net profit for the year	**32,456,234**	**34,499,132**	**32,164,890**	**37,113,417**
Total Comprehensive Income	**32,456,234**	**34,499,132**	**32,164,890**	**37,113,417**
Attributable to:				
Owners of the Parent	32,456,234	34,499,132	31,933,146	35,320,939
Non-Controlling Interest	-	-	231,744	1,792,478
Total Comprehensive Income	**32,456,234**	**34,499,132**	**32,164,890**	**37,113,417**
Weighted average number of shares in issues	**63,671,045**	**63,671,045**	**63,671,045**	**63,671,045**
Earnings per share (Tzs)	**510**	**542**	**502**	**555**
Dividend per share (Tzs)	**110**	**100**		

Consolidated Statement of Financial Position
as at 31 Dec'2013

	Company Dec'2013 Tzs'000	Company Dec'2012 Tzs'000	Group Dec'2013 Tzs'000	Group Dec'2012 Tzs'000
ASSETS				
Non-current assets				
Property Plant and Equipment	132,736,446	103,026,587	137,902,268	108,464,946
Intangible assets	-	-	7,444,384	2,827,792
Due from Employee's Share trust	506,787	467,241	506,787	467,241
Investment in Group	11,596,812	5,468,104	-	-
	144,840,045	**108,961,932**	**145,853,439**	**111,759,979**
Current assets				
Inventories	20,257,181	28,218,706	22,093,147	31,882,065
Accounts receivable third party and other	9,414,579	9,139,159	4,895,344	3,649,146
Tax recoverable	-	-	3,133,221	5,643,832
Cash and bank	30,531,552	38,756,679	31,612,679	40,943,678
	60,203,312	**76,114,544**	**61,734,391**	**82,118,721**
TOTAL ASSETS	**205,043,357**	**185,076,476**	**207,587,830**	**193,878,700**
EQUITY AND LIABILITIES				
Capital and Reserves				
Issued share capital	1,273,421	1,273,421	1,273,421	1,273,421
Retained earnings	169,737,752	143,959,986	168,431,556	143,176,878
Equity attributable to owners of the parent	171,011,173	145,233,407	169,704,977	144,450,299
Non-Controlling interest	-	-	-	2,473,971
	171,011,173	**145,233,407**	**169,704,977**	**146,924,270**
Non-current Liabilities				
Provision for Quarry site Restoration	73,449	69,448	73,449	69,448
Deferred tax liability	20,226,783	19,354,560	20,226,783	19,354,560
	20,300,232	**19,424,008**	**20,300,232**	**19,424,008**
Current liabilities				
Bank overdraft	-	-	60,598	911,922
Trade and other payables	15,481,256	18,419,498	19,169,451	24,332,276
Income tax payable	(1,749,304)	1,999,563	(1,647,429)	2,286,224
	13,731,952	**20,419,061**	**17,582,621**	**27,530,422**
TOTAL EQUITY AND LIABILITIES	**205,043,357**	**185,076,476**	**207,587,830**	**193,878,700**

Consolidated Statement of Cash Flows
for the year ended Dec'2013

	Company Dec'2013 Tzs'000	Company Dec'2012 Tzs'000	Group Dec'2013 Tzs'000	Group Dec'2012 Tzs'000
Cash generated from operating activities				
Net profit from operations	43,884,647	49,179,389	46,012,586	55,666,447
Depreciation	5,778,295	5,133,902	6,052,769	5,462,771
Loss/Gain on sale of property, plant & equipment	33,141	(33,579)	33,141	(47,165)
Other non cash items	4,002	4,002	4,002	4,002
Cash generated from trading	**49,700,085**	**54,283,714**	**52,102,498**	**61,086,055**
(In)/decrease in inventories	7,961,525	4,279,093	9,788,919	4,232,491
(In)/decrease in accounts receivable	(275,420)	(711,032)	1,264,413	(205,562)
(De)/Increase in accounts payable	(2,931,251)	45,627	(5,155,834)	(2,938,615)
Cash flow from operations	**54,454,939**	**57,897,402**	**57,999,996**	**62,174,369**
Other income	1,790,400	1,796,386	-	113,386
Net interest received (paid) -	370,171	295,898	311,183	153,234
Income taxes paid	(16,465,628)	(13,975,086)	(17,220,309)	(15,851,516)
Net cash generated from operations	**40,149,882**	**46,014,600**	**41,090,870**	**46,589,473**
Investing activities				
Acquisition of Subsidiary net of cash acquired	(6,128,708)	-	(6,128,708)	-
Proceeds on disposal	-	58,994	-	68,996
Purchase of Fixed assets	(35,521,295)	(8,573,396)	(35,523,232)	(8,711,800)
Net cash flow used in investing activities	**(41,650,003)**	**(8,514,402)**	**(41,651,940)**	**(8,642,804)**
Financing activities				
Employees' Share Trust	(39,546)	(146,428)	(39,546)	(146,428)
Repayment of loan	-	(2,500,000)	-	(2,500,000)
Ordinary dividend paid	(6,685,459)	(5,857,736)	(6,685,459)	(5,857,736)
Dividend paid to Non-Controlling Interest	-	-	(1,193,600)	(1,160,000)
Net cash used in financing activities	**(6,725,005)**	**(8,504,164)**	**(7,918,605)**	**(9,664,164)**
(De)/Increase in cash and cash equivalents	**(8,225,127)**	**28,996,033**	**(8,479,675)**	**28,282,504**
Cash and cash equivalents at 1 January	38,756,679	9,760,646	40,031,756	11,749,252
(De)/Increase in cash and cash equivalents	(8,225,127)	28,996,033	(8,479,675)	28,282,504
Cash and cash equivalents at 31 December	**30,531,552**	**38,756,679**	**31,552,081**	**40,031,756**

Information to Members
The Company Secretary would like to inform the Members that dividends can be directly transferred to their bank accounts.

Members can contact CAD Securities on 0779 303030 for information on how to have the dividends deposited directly into their bank accounts.

L. Masha
Chairperson
05 March 2014

R. Swart
Managing Director

David Lee
Company Secretary

Tanga Cement Company Limited
PO Box 5053
Tanga
Tanzania
info@simbacement.co.tz

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TATEPA LIMITED
FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2013
STATEMENTS OF FINANCIAL POSITION

		Group		Company	
ASSETS	Note	2013 TShs '000	2012 TShs '000	2013 TShs '000	2012 TShs '000
Non-current assets					
Property, plant and equipment	17	6,694,696	7,234,912	-	-
Biological assets	18	2,496,593	2,040,470	-	-
Intangible asset		4,727	4,727	-	-
Deferred tax assets	29	1,119,699	334,056	98,917	96,726
Investment in subsidiaries	19	-	-	2,402,462	2,402,462
Prepaid land rent	21	19,867	32,764	-	-
Loans receivable	20	273,444	201,885	1,756,598	1,445,089
		10,609,026	9,848,814	4,257,977	3,944,277
Current assets					
Inventories	22	3,960,240	4,195,608	-	-
Trade and other receivables	23	2,668,677	2,089,396	58,902	40,094
Loans receivable	20	-	-	341,458	309,345
Income tax recoverable		429,601	261,185	239,086	195,484
Bank balances and cash	24	159,867	504,012	37,149	7,753
		7,218,385	7,050,201	676,595	552,676
Total assets		17,827,411	16,899,015	4,934,572	4,496,953
EQUITY AND LIABILITIES					
Equity attributable to owners of the parent					
Share capital	31	466,431	446,429	466,431	446,429
Share premium	31	4,048,462	3,748,429	4,048,462	3,748,429
(Accumulated losses)/retained earnings		(1,592,496)	174,278	68,700	(29,288)
Proposed dividends		-	187,500	-	-
		2,922,397	4,556,636	4,583,593	4,165,570
Non-controlling interests		100,372	1,093,231	-	-
Total equity		3,022,769	5,649,867	4,583,593	4,165,570
LIABILITIES					
Non-current liabilities					
Borrowings	26	4,365,958	5,084,093	-	-
Deferred capital grant	27	272,225	292,504	-	-
Retirement benefit obligations	29	494,161	372,269	561	-
		5,132,344	5,748,866	561	-
Current liabilities					
Trade and other payables	25	2,721,326	1,983,138	350,418	331,383
Borrowings	26	6,950,972	3,517,144	-	-
		9,672,298	5,500,282	350,418	331,383
Total liabilities		14,804,642	11,249,148	350,979	331,883
Total equity and liabilities		17,827,411	16,899,015	4,934,572	4,496,953

The financial statements on pages 14 to 67 were approved by the Board of Directors and signed on its behalf by:

J J Mungai - Chairman

Date: 30 January 2014

TATEPA LIMITED
FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2013
STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

		Group		Company	
		12 months	9 months	12 months	9 months
	Note	Sep 2013 TShs '000	Sep 2012 TShs '000	Sep 2013 TShs '000	Sep 2012 TShs '000
Revenue	6	18,602,444	15,517,370	-	-
Gain arising from changes in fair value less costs to sell of biological assets	17	456,123	440,231	-	-
		19,058,567	15,957,601	-	-
Cost of sales	7	(14,352,902)	(10,802,452)	-	-
Gross profit		4,705,665	5,155,149	-	-
Other operating income	8	7,517	57,365	752,214	84,870
Selling and marketing costs	9	(2,587,833)	(1,630,981)	-	-
Administrative expenses	10	(3,804,943)	(2,879,793)	(531,493)	(493,042)
Grant amortisation	26	20,279	8,450	-	-
Operating (loss)/profit		(1,659,315)	710,190	220,721	(408,172)
Interest income	13	30,146	93,691	263,810	184,258
Finance cost	12	(914,242)	(705,360)	-	-
(Loss)/profit before income tax expense		(2,543,411)	98,521	484,531	(223,914)
Income tax credit/(expense)	14	537,772	407,282	(29,645)	67,174
(Loss)/profit for the year		(2,005,639)	505,803	454,886	(156,740)
(Loss)/profit attributable to:					
- Owners of the parent		(1,405,474)	389,866	-	-
- Non-controlling interests		(600,165)	115,937	-	-
		(2,005,639)	505,803	-	-
Earnings per share attributable to the equity holders of the Company during the year (expressed in TShs per share)					
Earnings per share (basic and diluted)	15	(76.70)	21.83	-	-

STATEMENTS OF COMPHREHENSIVE INCOME

(Loss)/profit for the year	(2,005,639)	505,803	454,886	(156,740)
Other comprehensive income -Actuarial (loss)/gain, net of tax	(5,740)	-	245	-
Total comprehensive (loss)/income for the year	(2,011,379)	505,803	455,131	(156,740)
Attributable to:				
Owners of the parent	(1,409,631)	115,937	-	-
Non-controlling interests	(601,748)	389,866	-	-
	(2,011,379)	505,803	-	-

Tanzania Cigarette Company Ltd
Rasilimali ya Tanzania

TCC

Audited financial results for the year ended December 31, 2013
Extracts of the financial statements

I am pleased to report that for the full year to December 31, 2013, we achieved good results despite a challenging environment.

Results

Gross turn over grew 5.5% (TZS 445.6 billion compared to TZS 422.6 billion achieved in 2012) driven by pricing and double digit volume growth in export markets. Domestic sales volume was broadly flat with market share slightly lower than last year due to pressure on disposable income, increased competitors' activities and contraband.

Our share price reached an all-time high of TZS 8,600 as at December 31, 2013 (December 31, 2012: TZS 4,200) and our market capitalization more than doubled to TZS 860 billion (2012: TZS 420 billion), reflecting growing investors' confidence in the sustainability of our business.

Continued down-trading by consumers to lower margin brands post excise tax increases (20.45% and 10% in July 2012 and 2013 respectively) and higher operating costs adversely impacted our profit after tax. 2013 profit after tax was TZS 78.1 billion, down 9.2% from TZS 85.9 billion in 2012.

Dividend

Based on the 2013 performance, the Board of Directors have recommended a final ordinary gross dividend of TZS 200 per share and a special gross dividend of TZS 250 per share. When added to the interim dividend of TZS 300 per share paid in October 2013, the total dividend for the year is TZS 750 per share. The final gross ordinary and special dividends will be paid on or about May 09, 2014, subject to shareholders' approval at the Annual General Meeting to be held on April 16, 2014.

The register of Members will close on April 8. The last day of trading cum-dividend will be April 2. The final dividend will be paid to all TCC shareholders on or about May 9.

2014 outlook

With the strength of our portfolio, our expertise, the pool of talent and the strategy we have in place, I remain confident that we will continue to deliver sustainable growth. More so, I am optimistic about the economic outlook for Africa and Tanzania in specific which will accelerate our growth. We are well positioned to take advantage as and when such a favorable environment prevails.

Appreciation

Finally, I would like to extend my special thanks to all our employees for their dedication and hard work, to the Board of Directors for their farsighted support, to our customers, consumers, parent company, Japan Tobacco International, all shareholders and stakeholders for their continued support to our business.

Majd Abdou
Chairman and CEO

Tanzania Cigarette Company Ltd
Statement of profit or loss and other comprehensive income for the year ended 31 December, 2013

(Audited)	2013 TZS M	2012 TZS M	Change %
Gross turnover	445,633	422,594	5.5%
- VAT	(60,450)	(58,805)	2.8%
Revenue	385,183	363,789	5.9%
- Excise duty	(94,582)	(82,370)	14.8%
Net sales	**290,601**	**281,419**	**3.3%**
- Cost of sales	(103,991)	(93,705)	11.0%
Gross profit	186,610	187,714	-0.6%
- Operating expenses	(74,473)	(63,986)	16.4%
Profit before tax	**112,137**	**123,728**	**-9.4%**
- Income tax expense	(34,079)	(37,787)	-9.8%
Profit for the year	**78,058**	**85,941**	**-9.2%**
Other comprehensive income:			
Items that will not be reclassified subsequently to profit or loss			
- Defined benefit actuarial gain/(loss)	6,849	(2,082)	
- Tax relating to components of other comprehensive income	(2,055)	624	
Total comprehensive income, net of income tax	**82,852**	**84,483**	-1.9%
Earnings per share:			
Basic and diluted (TZS per share)	781	859	

Tanzania Cigarette Company Ltd.
Statement of cash flows for the year ended 31 December, 2013

(Audited)	2013 TZS M	2012 TZS M
Cash flows from operating activities		
Cash generated from operating activities	140,399	104,248
Defined benefit paid	(264)	(169)
Interest received	2,439	2,229
Interest paid	(14)	(6)
Income tax paid	(36,693)	(34,177)
Net cash generated by operating activities	**105,867**	**72,125**
Cash flows from investing activities:		
Purchase of property, plant and equipments	(20,297)	(15,803)
Proceeds from disposal of property, plant and equipments	866	251
Net cash used in investing activities	**(19,431)**	**(15,552)**
Cash flows from financing activities:		
Dividends paid to owners of the company	(75,000)	(60,000)
Net cash used in financing activities	**(75,000)**	**(60,000)**
Net increase/(decrease) in cash and cash equivalents	11,436	(3,427)
Cash and cash equivalents at the beginning of the year	30,404	33,831
Cash and cash equivalents at the end of the year	**41,840**	**30,404**
Represented by:		
Cash & bank balances	**41,840**	**33,831**

Tanzania Cigarette Company Ltd
Statement of financial position as at 31 December 2013

(Audited)	2013 TZS M	2012 TZS M
Assets:		
Non-current assets		
Property, plant and equipment	100,078	96,527
Intangible assets	528	793
Total non-current assets	**100,606**	**97,320**
Current assets:		
Inventories	92,381	73,547
Trade and other receivables	13,922	21,711
Cash and bank balances	41,840	30,404
Total current assets	**148,143**	**125,662**
Total assets	**248,749**	**222,982**
Equity and liabilities:		
Capital and reserves:		
Share capital	2,000	2,000
Defined benefit actuarial gain/(loss)	2,021	(2,773)
Retained earnings	176,748	173,690
Shareholders equity	**180,769**	**172,917**
Non-current liabilities:		
Deferred tax liabilities	7,662	4,596
Defined benefit obligation	6,168	12,209
Total non-current liabilities	**13,830**	**16,805**
Current liabilities:		
Trade and other payables	52,878	28,363
Income tax payable	1,272	4,897
Total current liabilities	**54,150**	**33,260**
Tolal liabilities	**67,980**	**50,065**
Total equity and liabilities	**248,749**	**222,982**

twiga cement
HEIDELBERGCEMENT Group

AUDITED RESULTS
FOR THE YEAR ENDED 31 DECEMBER 2013

CHAIRMAN'S STATEMENT

Tanzania Portland Cement Company Ltd (TPCC) strengthened is brand image through quality and service focus.

The Tanzanian economy grew at a continuous pace of about 7% to confirm the positive expectations from previous years. In the year under review, the Tanzanian Shilling was relatively stable compared with the major trading currencies, depreciating by less than 1% against the USD.

The cement market was continuously disrupted by the importation of large quantities of cement at the limit of unfair competition practices, which harmed the cement industry as whole and TPCC as the market leader. TPCC is always advocating for fair competition at all levels.

INCOME STATEMENT	2013 TZS'000	2012 TZS'000	Change
Revenue	213,775,188	249,111,727	-14.2%
Cost of sales	(138,409,472)	(126,706,477)	9.2%
Gross profit	**75,365,716**	**122,405,250**	-38.4%
Selling and administrative expenses	(23,116,863)	(18,844,337)	22.7%
Other operating income/ (charges)	10,018,460	(441,124)	-2,371.1%
Depreciation and amortisation	(13,110,694)	(11,959,927)	9.6%
Operating profit	**49,156,619**	**91,159,862**	-46.1%
Financial items	1,238,822	1,181,318	
Profit before tax	**50,395,441**	**92,341,180**	-45.4%
Taxes on income	(12,755,372)	(30,762,591)	-58.5%
Profit for the year	**37,640,069**	**61,578,589**	-38.9%
Other comprehensive Income , net of tax	(3,088,890)	(1,239,442)	149.2%
Total Comprehensive Income	**34,551,179**	**60,339,147**	-42.7%
Number of Shares	179,923,100	179,923,100	
Earnings per share (TZS)	209.2	342.25	-38.9%
Dividends per share (TZS)	195	185	5.4%

BALANCE SHEET	2013 TZS'000	2012 TZS'000	Change
Assets			
Intangible fixed assets	141,980	251,308	
Tangible fixed assets	177,619,994	154,501,002	
Non.current assets	**177,761,974**	**154,752,310**	14.9%
Inventories	52,372,241	50,117,949	
Trade and other receivables	20,858,955	18,392,925	
Cash and cash equivalents	43,488,040	54,567,099	
Current assets	**116,719,236**	**123,077,973**	-5.2%
Total assets	**294,481,210**	**277,830,283**	5.9%
Equity and Liabilities			
Equity	**223,291,173**	**213,029,613**	4.8%
Long-term provisions	5,479,930	3,561,155	
Provision for deferred taxes	24,810,815	29,462,736	
Interest bearing borrowings	276,998	327,364	
Non-current liabilities	**30,567,743**	**33,351,255**	-8.3%
Short term financial liabilities	66,523	70,510	
Trade and other payables	37,731,328	28,278,311	
Dividend payable	2,522,267	2,418,261	
Tax payables	302,176	682,333	
Current liabilities	**40,622,294**	**31,449,415**	29.2%
Total equity and liabilities	**294,481,210**	**277,830,283**	5.9%

Auditors: Ernst & Young

2013 can be defined as a challenging year. Due to strong market pressure and production limitations resulting from an accidental fire on the main transformer, TPCC suffered a reduction of 10% on cement sales volume. Pressure on prices together with the reduction of volumes, had a negative impact of 14% on our accumulated turnover. All the above, negatively impacted TPCC's Operating Profit by 46% Nevertheless, the overall financial performance of TPCC, even though not at expected levels, continued to add positive value for our shareholders, with strong signs of recovery towards the end of the year.

Prospects

TPCC has worked hard to increase its operational excellence, reduce production cost, while maintaining a leadership position in the Tanzanian market. The start-up of a new cement mill in the second part of the year, will allow us to meet future market challenges.

Appreciation

The Board would like to thank all TPCC's stakeholders for their support during the past year and looks forward to continued good relations for the years to come.

Dividend

The Board proposes a dividend for 2013 of TZS 195 per share. This is an increase of 5% compared to the previous year. The proposed dividend represents 93% of the Net Profit for the year.

The Register of Members will close on 16 April 2014. The last day of trading cum dividend will be 11 April 2014. Dividend will be paid on or about 30 June 2014.

BY ORDER OF THE BOARD

Jean - Marc Junon
Chairman of the Board
20 March 2014

CASH FLOW STATEMENT	2013 TZS'000	2012 TZS'000
Profit before tax	50,395,441	92,341,180
Depreciation & Amortisation	13,110,694	11,959,927
Interest paid	(202,080)	(4,501)
Income taxes paid	(16,463,622)	(24,267,606)
Elimination of non cash items	183,684	(1,184,365)
Change in working capital	3,320,816	(22,025,616)
Cash flow from operating activities	**50,344,933**	**56,799,020**
Cash flows from investing activities	(37,080,730)	(14,507,049)
Dividend paid	(24,289,619)	(33,919,991)
Long term loan paid	(53,643)	(50,364)
Change in cash and cash equivalents	**(11,079,059)**	**8,321,616**
Cash and equivalents 01.01	54,567,099	46,245,482
Change in cash	(11,079,059)	8,321,616
Cash and equivalents 31.12	**43,488,040**	**54,567,099**

Tanzania Portland Cement Company Limited
P.O.Box 1950
Dar-es-salaam
Tanzania.
Tel +255 22 5522000 Fax: +255 22 5522009
www.twigacement.com
Email: info@twigacement.com

FINANCIAL STATEMENTS 2013

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Extract of audited financial statements for the year ended 31 December 2013

STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2013

	2013 TZS '000	2012 TZS '000
Revenue	10,832,491	9,555,089
Cost of sales	(6,234,812)	(5,827,514)
Gross profit	**4,597,679**	**3,727,575**
Other income	90,476	612,327
Operating expenses	(3,331,515)	(2,730,272)
Operating profit	**1,356,640**	**1,609,630**
Finance costs	(411,115)	(232,495)
Profit before tax	**945,525**	**1,377,135**
Income tax expense	**52,970**	**(425,035)**
Profit for the year	998,495	952,100
Other comprehensive income	-	-
Total comprehensive income	**998,495**	**952,100**
Basic and diluted earnings per share (TZS)	**26.88**	**25.58**

STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2013

	2013 TZS '000	2012 TZS '000
ASSETS		
Non-current Assets		
Property, plant and equipment	13,232,964	11,663,952
Intangible asset	68,898	64,581
	13,301,862	**11,728,533**
Current assets		
Inventories	1,963,384	1,071,544
Trade and other receivables	2,399,272	1,215,152
Cash and bank balances	611,835	214,729
	4,974,491	**2,501,425**
TOTAL ASSETS	**18,276,353**	**14,229,958**
EQUITY AND LIABILITIES		
Equity		
Share capital	4,356,246	3,722,369
Share premium	3,739,087	3,739,087
Accumulated losses	(3,798,091)	(4,796,434)
	4,297,242	**2,665,022**
Non-current liabilities		
Long term borrowings	4,273,949	5,009,540
Deferred tax liability	685,743	1,077,973
Cylinder deposits	498,860	341,476
	5,458,552	**6,428,989**
Current liabilities		
Trade and other payables	4,681,752	3,086,679
Tax payable	339,260	7,188
Bank overdraft	2,397,977	958,316
Current portion of loans	1,101,570	1,083,764
	8,520,559	**5,135,947**
TOTAL EQUITY AND LIABILITIES	**18,276,353**	**14,229,958**

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2013

	2013 TZS '000	2012 TZS '000
OPERATING ACTIVITIES		
Profit before tax	945,525	1,377,135
Adjustment for non cash items		
Depreciation and amortisation	908,724	858,292
Interest paid	411,115	232,495
Impairment of receivables	-	76,267
Gain on disposal of fixed assets	(7,673)	(53,164)
	2,257,691	**2,491,025**
Movements in working capital		
Increase in inventories	(891,839)	(752,741)
Decrease/(increase) in trade and other receivables	(1,184,121)	1,092,335
Increase/(decrease) in cylinder deposits	157,387	(298,583)
Increase in trade and other payables	1,587,885	403,542
	(330,687)	**444,553**
Net cash flow from/(used in) operating activities	**1,927,004**	**2,935,578**
INVESTING ACTIVITIES		
Purchase of property , plant and equipment	(2,457,370)	(6,674,850)
Purchase of intangibles	(24,687)	(4,160)
Proceeds from sale of assets	7,673	57,500
Net cash flow used in investing activities	**(2,474,384)**	**(6,621,510)**
FINANCING ACTIVITIES		
Bank loan received	380,920	4,025,155
Bank loan repaid	(1,098,855)	(237,467)
Rights issue proceeds	633,877	
Interest paid	(411,115)	(232,495)
Net cash flow from/(used in) financing activities	**(495,173)**	**3,555,193**
Net decrease in cash and cash equivalent	(1,042,554)	(130,739)
Cash and cash equivalent at 1 January	(743,587)	(612,847)
Cash and cash equivalent at 31 December	**(1,786,141)**	**(743,587)**

Full set of financial statements should be referred for more information and disclosures. This is available from TOL Gases LTD Head Office.

4B Nyerere Road, P.O Box 911, Dar es Salaam, Tanzania | Tel: +255 22 2860 047/8/9, Fax: +255 22 2 864 041, Website: www.tolgases.com